

# *Clinical Medicine and Surgery*

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## *\* Editorial \**

### **William Cullen**

#### **Teacher and Clinician**

THE contemporaries of world-famous men, even though they possess great abilities, are often unwarrantably overshadowed. The renown of the remarkable Hunter brothers (William and John) in surgery, thus obscured the eminence in medicine of a man who was born in the same district (Lanarkshire, Scotland), six years before the birth of William Hunter, and who, in his country and time, was held in equally high regard. In fact, it seems probable that our earliest great American poet, Bryant, was named after him, since Bryant's father was a physician and was contemporary with this remarkable teacher and clinician.

William Cullen was born, of humble parents, in 1712, and after serving his apprenticeship as a surgeon apothecary, became surgeon on a merchant ship trading between London and the West Indies. He soon had enough of this, however, and returned to his home neighborhood to begin general practice and carry on his studies in chemistry, in which he was much interested.

In 1737 he moved to Hamilton, and a few years later entered into an interesting partnership with William Hunter, with the understanding that, during the winters, one of the partners, alternately, should attend some medical school, while the other carried on their joint practice. Cullen took the first turn, and spent the winter at Edinburgh. Hunter chose London, when his turn came, where he made such a favorable impression on Dr. Douglas, the lecturer on anatomy and obstetrics, that he was offered an assistantship. Cullen generously

released Hunter from the partnership, and they never saw each other again, though Cullen, too, was headed for high places.

He received his Doctor's degree in Medicine in 1744, and two years later had the good fortune to be called to attend the Duke of Hamilton in a sudden illness, and handled the case so well that the nobleman procured for him the position of lecturer on chemistry at the University of Glasgow. In this work he was such a success that he outshone all previous incumbents by his talent for arrangement, his vivacity as a lecturer, and his mastery of the subject. Along with it he conducted his large general practice so successfully that, in 1751, the King appointed him professor of medicine.

About this time, the University of Edinburgh felt a need to strengthen its faculty, and by 1756, Cullen's reputation as a teacher and clinician had grown so great that he was offered the chair of chemistry in that famous institution, and acquitted himself so brilliantly that he added materially to the prestige of the University, so that students came from all over the world to study under him. His reputation as a practicing clinician also increased steadily, for his patients not only respected and trusted him as a physician, but loved him as a man of culture and deep human sympathy.

In 1763, he was given the chair of *matéria medica*, in addition to that of chemistry, and again scored such a success that, a few years later, he was advanced to the post of professor of the theory

and practice of medicine, which chair he held, with great honor, until his death, in 1790.

In person, Dr. Cullen was tall and slender, of a contemplative aspect when in repose, but vivacious, kindly, and charming in conversation or on the lecture platform. His books—"Physiology" (a brief and early treatise); "First Lines of the Practice of Physic" (1784); "Nosology" (his most popular work); and "Materia Medica," were translated into French, German, and Latin, and were standard texts in those languages, as well as in English, for many years.

In these days when the leveling of physicians to a common plane of politicalized mediocrity is being so loudly and widely propagandized, we will do well to remember the achievements of such individualists as Cullen and the Hunters, and demand that the same privileges be preserved for the medical men of the twentieth century.

Not in the clamor of the crowded street,  
Not in the shouts and plaudits of the throng,  
But in ourselves, are triumph and defeat.

—LONGFELLOW

### Vision

A STORY is told of the famous artist, Turner, whose bold use of vivid color is familiar to all, that, on a certain occasion, he was looking at one of his wonderful paintings with a lady of his acquaintance when she remarked, "Mr. Turner, I never saw a sunset like that." The artist replied, "Ah, Madam, but don't you wish you could?"

Beauty is all about us, especially at this season of the year. Not only does the sun set in glory every night, and the moon rise in solemn majesty at her appointed time, as always, but just now all the forces of life are rising to their culminating expression. The strong leaves tremble in the summer wind. The hedges of the roadside are gorgeous with roses. The birds and the beasts of the field are palpitant with life.

How many of us lift our heads from the path of life along which we are plodding long enough to refresh our souls with the glory that glows on every side? How many of us have ever invested even a few hours in training our eyes to see and our faculties to appreciate the wonders of God's daily miracle which we call the life of Nature, or that almost more astonishing miracle which is revealed when nature is transmuted through a personality and appears as a great picture?

This training and these moments when we absorb and assimilate the joy of the beautiful are *not* time wasted—for *anyone*—nor even time spent; they are time *invested* which will, in the future—*our* future, here on earth; not some future in another stage of existence which, however real to some of us, may seem problematical to others—pay enormous dividends, not merely in the form of rich and abiding happiness and inner solace, but in in-

creased efficiency in our daily work; for every exercise of the faculties of perception and appreciation, in any way whatsoever, increases our power to perceive and appreciate the factors which enter into our personal, everyday problems and thus enlarges our potentialities of usefulness to every one with whom we come in contact.

When the universe no longer holds any amusement for a man, it is time for him to die. — PROF. ALBERT A. MICHELSON.

### Saving Time

THE United States has gone mad on the subject of saving time.

We send our motors hurtling along the highways at breakneck speed and take chances of sudden death or maiming, in order to pass a car in front of us which is going as fast as we *ought* to go, that we may arrive somewhere ten minutes sooner than we would get there if we drove at a rational speed.

We wait two hours in order to ride upon a train which will deliver us at our destination in thirty minutes less running time than the slower train which left earlier.

We pay fifty dollars a day or more for every day saved, in order to cross the Atlantic on the fastest liners.

In more ordinary matters, we spend ten minutes in getting out the automobile and parking it, in order to save five minutes on a half-mile walk; or we hop in a taxi to go six blocks.

Physicians take on so many cases that they must "save time" by having an assistant or a technician do a good many things that they ought to do personally. Housewives buy every stitch of their own and the children's clothes ready-made (although they know that they cost more and are worth less than those made at home), in order to "save time."

What does it all amount to? What do we do with all the time "saved" by the breathless speed at which most of us live? If we save money we, presumably, have it to spend for something more worthwhile—if it doesn't all go "pouf!" in the stock market. Does saved time work out anything like that, as a rule? Hardly!

Somebody with more industry than sense once figured out the amount of time lost, in a great city like New York or Chicago, by people who were waiting for street-cars, and opined that it would be enough to transact all the business of a metropolis. The only trouble with that idea is that individual lost minutes cannot, like pennies, be pooled and used later. We must, personally, utilize our hours and days *as they come*. They cannot be hoarded.

It is true that the development of the so-called higher things of life—art, music, conversation, and that scarcely definable but utterly desirable something which we call *culture*—is possible only to a group or nation which has some degree of leisure. But the possession of leisure does not, of itself, confer all of these benefits. These come only by the proper *use* of the hard-earned hours of freedom

from the pressure of the necessity for earning the daily bread—and plenty of cake and jam.

Most people consider, when they are about to spend a sum of money, whether it will buy them something which will give them its worth in satisfaction. Do most of us ever give the same thought to our expenditures of time?

What are people doing with the hours which have been saved by all the wonderful mechanical devices which the last half-century has marshalled to aid us in the process of living?

The men who have been relieved of the necessity for hewing wood and drawing water; of hunting their meat and making their shoes, are, all-too-frequently, spending the "saved" hours in poker and hootch parties, joy riding, or reading trashy or pornographic stories. Even golf, which is a harmless (if the stakes are not too high) and exhilarating pastime, in itself, is a poor substitute for the physical and spiritual glow which comes from doing a truly *constructive* piece of work well.

The women who have "saved" an immense amount of time by living in a two-by-four apartment and eating at cafeterias, are often hard put to it to find ways of "killing" that which they have saved. Bridge parties, movies, and other occupations which, at their best, are decidedly ephemeral, are the means used for this shocking slaughter of that which, once killed, can never return to us.

Recreation is fine and is truly indispensable, when it actually comes as a welcome respite from productive effort; but, when it is engaged in as the sole or chief purpose in life, it becomes about the hardest work in the world—and the most childish.

Leisure offers so many possibilities for growth in powers, in faculties, in knowledge, and in capacity to appreciate these fine types of happiness which *stay with us*, that it is pitiful to see so many working so hard to secure it, and then scattering its golden moments like a drunken sailor, in the pursuit of lust or selfishness or idle whims.

If we have some sound profitable way for *investing* our saved minutes, let us save them with all diligence and eagerness! But he who saves time for the mere excitement of saving it, is as despicable as the miser who starves and freezes his body, in order to gloat over his hoard of those shining bits of metal which, if they have not bought him happiness, are of far less value than the bright-colored beads which bring delight to the simple savage.



Little men announce that they have "failed," because their wagers on clocks have brought them trouble. — WILLIAM DUDLEY PELLEY.



### Courage in Sickness

IN order to gain any clear idea of the quality of courage, as manifested in the presence of illness; the matter must be considered from two angles: First, the fortitude displayed in bearing without complaint the discomfort and pain of some disease which is distressing, but not dan-

gerous to life; and, second, the way a man de-mean himself when stricken by a malady whose outcome will or may be fatal.

In the former conditions, the two chief determining factors are: the sensitiveness of the individual's nervous system to pain-producing stimuli; and, more important, his habit of life, as regards all those things which annoy and distress him.

Both these factors were illustrated by the Indians of pioneer days, in the United States, and are still in evidence among the Moros of the Sulu archipelago and other primitive peoples. A Moro will undergo a very considerable surgical operation without an anesthetic of any kind and, not merely without cries and groans, but actually *without flinching*. This is made possible by two circumstances: The probability—though the fact is not definitely proved—that he actually *feels less pain* than a more highly organized person would experience from the identical injury; and that his whole life has been a hard one, filled with physical discomforts, woundings and diseases, so that he is inured to such vicissitudes and considers them the common lot of humanity. Moreover, the expression of emotions of the softer varieties is considered beneath the dignity of an adult person.

Contrast this with the clamorous outcry emitted by a pampered person—especially a child or woman—who has known little or no physical discomfort of any kind, at the tiny pang produced by puncturing the skin with a hypodermic needle. Such a one, if slightly indisposed, with some insignificant illness, will give over the customary occupations and remain in bed, complaining bitterly.

Between these two extremes, there are all degrees of fortitude—or the lack of it—depending largely upon personal traditions and experiences and the standards common to the social group in which the sufferer lives. Under such circumstances it is fallacious to speak of stoicism as courage.

It is in the face of possible or probable death or permanent maiming that the true quality of the soul appears and, in such a predicament, three conditions determine the patient's conduct: The will, eagerness, and ability to live and function, even under serious handicaps; the possession of a thoroughly rational and vital philosophy of life; and confidence in the attending physician.

The man who has many unfinished undertakings in which he is keenly interested; who has clearly-formulated ideas—whatever they may be—regarding death and the possible reasons for suffering and disabilities; who is in possession of sufficient internal resources to render even a life of invalidism tolerable; and who has complete trust in the sincerity and skill of his medical adviser, is in a position to face the issue of any illness courageously.

Lacking a powerful incentive or the ability to live reasonably satisfactorily under difficulties; dreading death as one always dreads that which one does not understand and therefore recoils from; or harboring a doubt as to the ability or purposes of the doctor, it is not strange that a person may abandon himself utterly to unreasoning terror and give up the fight before the battle is even joined.

It is a curious fact that people who cut the sorriest figure in the minor illnesses and emergencies of life, not infrequently arise to sublime heights of self-forgetful courage when a great crisis faces them.

Courage in sickness, then, depends, in large measure, upon the entire cast of a man's character—his inherited stability; his racial and family traditions; his past experiences of hardship or protected ease; the nature and degree of training of his faculties; the sort of philosophy under which he is living and the degree to which he vitally accepts it; the state of his material and personal affairs; and the type of medical attention which is available to him.



### Why Is a Fat Man?

ANSWERS to the question, "Why is a fat man?" coming from the adherents of three different schools of scientific and medical thought, would probably vary considerably.

The endocrinologists would be apt to declare that obesity is wholly or chiefly due to a deficiency in the secretions of the ductless glands, especially the thyroid, pituitary, or gonads, or of two or more of these organs conjointly.

The anthropologists—such men as C. B. Davenport and George Draper—feel quite convinced that

fatness and thinness are definitely matters of heredity, and that the only way to be certain that one will retain a svelte figure throughout life is to choose a pair of slender parents; for, while fat parents may beget slim children, slender parents are sure to do so.

Most general clinicians have a rather clear impression, based upon personal observation, that fatness is principally a matter of how much one eats. This might be called the arithmetical school of thought: If the intake of calories exceeds the output, fatness will result, and vice versa.

The correct answer is probably a combination of all these three. Fatness in early life, especially if the excess of adipose tissue is localized, should call for a complete study of the endocrine functions, as the first procedure. Later (say after the age of thirty years or so), it will be well to begin by obtaining an honest and accurate account of the patient's performances with his knife and fork. This is not always easy to accomplish, as most fat people (practically all fat women) will deny, on casual questioning,

that they are heavy eaters, and a good many of them will lie about it when questioned in detail about "piecing" between meals.

Even those who have fat ancestors (the "herbivorous type" of Draper—those who have long bowels and nourish themselves easily) can generally keep their embonpoint within respectable limits, if they will reduce their caloric intake sufficiently.

The physician who is appealed to for help in reducing fatness should first satisfy himself of the honesty and sincerity of his patient. If these qualities are lacking, he should refuse to take the case, as no benefit will result to anyone. Then, after careful study of the patient, he should make out a *specific* diet, based upon calories, and *insist* that the patient follow it religiously. If definite results are not produced by a gradual reduction of the caloric intake, within a reasonable time, a thorough endocrine study is in order.

#### NEXT MONTH

**Drs. John G. Codik and Anna Furedy, of New York City, will report their results in the treatment of 200 cases of cardiovascular and nervous disorders with xanthine derivatives (caffeine, theobromine, and the like).**

**Dr. Frank A. Vesey, of New York City, will consider the rationale of and clinical results with a new antacid-adsorbent formula in gastro-intestinal disorders.**

**Dr. Wheaton's article, scheduled for appearance in May but unavoidably delayed, will appear.**

#### COMING SOON

**"Internal Saphenous Ligation: An Adjunct to the Injection Treatment of Varicose Veins," by Edwin A. Nixon, M.D., Seattle, Wash.**

**"The Gallbladder Problem," by Ralph L. Gorrell, M.D., D.N.B., Clarion, Ia.**

# ★ *Leading Articles* ★

## The Clinical Interpretation of Abdominal Pain \*

(With Special Reference to Surgical Diagnosis)

### Part I

By

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**I**N practically every abdominal emergency, pain is not only the outstanding symptom, but is also the first. This extremely annoying and unpleasant sensation is nature's danger signal. It is a message from an injured peritoneum, conveying a wealth of information, which, if heeded and understood, is invaluable in making an early diagnosis—and in early diagnoses lies our one hope of reducing the all-too-high mortality rate.

A careful study of the onset, location, and character of this important initial symptom will, in a large percentage of cases, lead to a proper and accurate diagnosis long before the so-called classical symptoms appear, after which event we can extend to the patient very little chance of recovery. The late John B. Murphy once said, "Somebody has been to blame for every death resulting from acute peritonitis."

The patient is usually seen first by the family physician (seldom by the surgeon), and, in many instances, under the most unfavorable circumstances. The light is usually dim; the room small and crowded with anxious, tearful relatives; the bed is low; and there is general confusion, which is anything but conducive to clear, logical thinking. Everyone is insistent in the demand that something be done, and, to make matters worse, there is invariably present at least one relative or neighbor whose austere unfriendliness sends a chill through the room, and who emphatically does not believe in doctors, hospitals, or operations.

To sit down deliberately, on a chair or on the side of the bed, and methodically take an accurate written account of the patient's story, will, in most situations, calm the tumultuous fears of the on-lookers and enlist greater cooperation. Therefore, in order to expedite the recording of essential data as gleaned from the oftentimes hysterical verbosity of the patient and his family, I have adopted the following scheme for history taking, which has been found exceedingly useful as a general guide (after Cope<sup>1</sup>):

#### Outline of History

Patient's name . . . . Sex . . . . Age . . . .  
Address  
Date and time of examination

<sup>1</sup>This is the first installment of a two-part article. The second installment will appear in an early issue.

#### HISTORY OF PRESENT CONDITION

##### *Exact time of onset*

##### *Pain:*

- 1.—Situation at first.
- 2.—Character.
- 3.—Pain on micturition.

##### *Mode of onset—acute or gradual?*

- 1.—Has it shifted?
- 2.—Any radiation?
- 3.—Affected by deep inspiration?

##### *Vomiting—before, at same time, or some hours after pain?*

- 1.—How often?
- 2.—Character of vomiting.
- 3.—Type of vomiting.

##### *Nausea*

##### *Bowels:*

- 1.—Regular, usually?
- 2.—Diarrhea?
- 3.—When last open?
- 4.—Any blood in stools?

##### *Menstruation:*

- 1.—Exact date of last period.
- 2.—Whether or not plus or minus.
- 3.—Painful or not.

##### *Exposure to insect bite (especially black widow spider).*

#### PAST HISTORY

Any serious previous illnesses? . . . Any dyspnea or precordial oppression? Indigestion . . . If so, how long after meals before pain comes? Jaundice . . . Melena . . . Hematemesis . . . Hematuria . . . loss of weight . . . Confinements (if any).  
Any history of hypertension or renal disease?

#### PRESENT CONDITION

Pulse . . . blood pressure . . . respiration . . . temperature . . . General appearance . . . facial expression . . . position in bed.

*Abdomen:* Pain . . . tenderness . . . cutaneous sensitiveness . . . rigidity . . . distention . . . hyperesthesia

- 1.—Movement on respiration.
- 2.—Free fluid.
- 3.—Thigh-rotation test.
- 4.—Tumor or external hernia.
- 5.—Liver dulness.

##### *Rectal Examination:*

Spine . . . knee jerks . . . pupils

Urine: Blood . . . pus . . . albumin . . . sugar

##### *Vaginal Discharge:*

##### *Bimanual Examination:*



The age incidence of various conditions giving rise to acute abdominal pain is both interesting and helpful. (1) Children under two years of age are usually victims of intussusception; (2) children and adults (but more frequently the latter) are susceptible to acute appendicitis, acute cholecystitis, and torsion of an ovarian cyst; (3) those between thirty and forty years of age (rarely before) may have cancerous growths or strictures; (4) perforated gastric or duodenal ulcers are rare before the teen age; (5) the child-bearing age group may have pelvic infections, derangements of the developing ovum, and ectopic gestations; and, finally, (6) pancreatitis has a predilection for middle age.

Fixing the exact time of the onset of pain will enable the clinician to estimate more accurately the pathologic changes which have already occurred, and will facilitate arriving at a more reasonable prognosis.

The perforation of a gastric ulcer or an attack of acute pancreatitis may awaken the patient out of a sound sleep. This may be true, to a greater or less degree, of acute appendicitis, cholecystitis, or biliary or renal colic.

It is important to determine whether or not abdominal pain was experienced immediately, or shortly after some injury, as serious lesions often follow apparently trivial trauma. Then, too, the physician should ask himself, in all cases of suspected appendicitis, "Was the 'stomachache' converted into a violent colic by the ill-advised administration of a cathartic?"

There are two abdominal crises which, because of the intensity of the pain they create, are likely to cause fainting, even in men. These are: perforation of a gastric or duodenal ulcer, and acute pancreatitis; and in women, rupture of a tubal pregnancy.

*Peritoneal irritation*, resulting from extravasation of blood in a case of a ruptured ectopic gestation, or pus from a ruptured pyosalpinx, or irritating fluid from a perforated gastric ulcer, will produce generalized abdominal pain from the very start; but the maximum intensity is usually felt, in the beginning, over the precise location of the lesion. The rise in temperature and the increase in the severity of the pain, keep pace with the changing conditions within the abdomen as peritonitis progresses. Hence, if any patient with abdominal pain is found to have a temperature of 104° to 105° Fahrenheit, at the onset of the illness, the chest and the kidneys should be carefully examined for the seat of the disease.

According to Bevan, the relative frequency of the various possibilities in the production of intraperitoneal infection, with consequent abdominal pain are:

- 1.—Acute appendicitis.
- 2.—Acute cholecystitis and diseases of the bile ducts.
- 3.—Lesions of the kidney and ureter.
- 4.—Diseases of the stomach and duodenum.
- 5.—Lesions of the female genitalia.
- 6.—Intestinal obstruction.
- 7.—Acute pancreatitis.

#### Types and Causes of Pain

There are three types of true abdominal pain:

- 1.—The *colic* due to the spasmodic contraction of a hollow viscus or duct during its attempt to expel anything within it which is acting as an obstruction.

- 2.—The *continuous* pain of tension in similar organs.

- 3.—Pain due to *irritation of the peritoneum*.

Burgess<sup>2</sup> has made an exhaustive study of viscerogenic reflexes and the association of nerve pathways, and has concluded that referred pain is an orderly response to irritative stimulation of the viscera, and is distributed segmentally at specific spinal levels. For example, pain from the stomach is referred to the peripheral distribution of the fifth to the eighth dorsal nerves (that is, between the xiphoid cartilage and the umbilicus); from the duodenum, close above the umbilicus; from the small intestine and appendix (eighth to eleventh dorsal), to the umbilical area (the umbilicus corresponding to the tenth dorsal); from the large intestine, to the midhypogastric line; from the liver, gallbladder, and bile ducts (seventh to ninth dorsal) the pain is radiated to the lower part of the epigastrium, and sometimes to the angle of the scapula (eighth dorsal). When the peritoneum is irritated, the pain set up is due to the nociceptive stimulation of the nerve endings of the extraperitoneal tissues, and is felt just at the site of stimulation.

Typical of referred pain radiating into the area of distribution of nerves coming from that segment of the spinal cord which supplies the affected part are:

- 1.—Renal colic, in which the pain is felt in the region of the testis or labium on the same side.

- 2.—Biliary colic, in which the pain is experienced at the angle of the right scapula or in the right supraclavicular region.

One should inquire, "Is the pain affected by respiration?" A pleurisy pain is always increased on deep inspiration; this is likewise true of pain resulting from any intra-abdominal condition which irritates or makes pressure against the diaphragm, such as a subdiaphragmatic abscess. Many an appendectomy has been needlessly performed on patients suffering from early pneumonia with concomitant diaphragmatic pleurisy and with pain projected to the abdomen.

The trajectory pain of coronary disease and angina pectoris is frequently to the gallbladder area, but accompanying substernal discomfort, a history of circulatory derangements, the absence of digestive disturbances in the foreground, a careful examination of the heart, and an electrocardiogram will usually make the diagnosis certain.

Sir James Mackenzie once made the statement, "Disease is made manifest to us only by the symptoms it produces," and falls into three groups—the structural, the functional, and the reflex.

Diseases of the *thoracic organs*, which initiate referred abdominal pain are: (1) Dorsal spinal caries; (2) tabes dorsalis; (3) pleurisy and pneumonia; (4) cardiovascular disease; (5) pulmonary tuberculosis; (6) diseases of the esophagus; and (7) postoperative phrenectomy.

Statistics from large clinics show that from 50 to 70 percent of all patients diagnosed as having *chronic appendicitis* failed to obtain permanent relief from appendectomy. Further investigations revealed that these same patients were suffering from such conditions as prolapse of the liver, ureteral calculus, ptosed kidney, retroperitoneal tumors, tumors of the mesentery, and extraureteral pathoses, when differentiated by uretero-pyelography<sup>3</sup>.

It must be recalled that different individuals present a wide range of reaction to pain. What is unpleasant or dull for one, may be described as

sharp or cutting by another. In all events, it is essential to interrogate the patient concerning the early administration of sedatives, alcohol, or morphine, as these tend to ameliorate the severity of the pain, and one is often misled by the apparent wellbeing of the patient. Significant symptoms may be masked, and valuable time may be lost, through postponement of surgery, with often fatal results. This is especially true following the indiscriminate use of morphine before a diagnosis has been reached.

Abdominal pain, when considered from an etiologic standpoint, falls into three distinct categories:

1.—*Inflammations*: The pain comes on slowly, gradually becoming more severe, and is accompanied by tenderness at the site of the lesion. Illustration—cholecystitis.

2.—*Perforations*: The pain is sudden and unexpected, and is characterized by extreme burning. Illustration—perforated gastric ulcer.

3.—*Obstructions*: The pain is sharp, colicky, and intermittent in character, and is localized at the point of obstruction, though it may often be referred elsewhere. Illustration—renal colic.

#### Inflammatory Lesions

- 1.—Acute appendicitis.
- 2.—Acute cholecystitis.
- 3.—Acute pancreatitis.
- 4.—Acute salpingitis.
- 5.—Acute diverticulitis.

1.—*Acute appendicitis*: This disease accounts for from 50 to 70 percent of all abdominal emergencies. The pain is at first referred to the epigastrium or umbilical region. It is sharp, colicky, and persistent, but gradually becomes localized in the right lower quadrant of the abdomen. As the inflammation increases, local tenderness develops, with protective rigidity of the overlying abdominal musculature. Local tenderness follows the initial pain closely, and in advance of vomiting, fever, and leukocytosis. All that is needed for the diagnosis is local pain, tenderness, and hyperesthesia.

Swint<sup>4</sup> has described three clinical signs which he has found both useful and reliable in arriving at an early diagnosis of acute appendicitis:

A. *Blumberg's sign* (or the peritoneal rebound test) is executed with the patient lying supine and with the knees flexed. The examining fingers are pressed slowly and firmly into the abdominal wall, over the site of the suspected lesion, and are suddenly withdrawn. This abrupt release of deep abdominal pressure will produce excruciating pain if the parietal peritoneum is irritated or inflamed.

B. *Meltzer's sign*: With the patient lying on his sound side, the fingers are pressed deeply over the site of the appendix and he is requested to flex the thigh on the abdomen with the knee extended. This maneuver causes pain because the diseased appendix is caught between the taut iliopsoas muscle and the examiner's fingers.

C. *Livingston's sign* (or the test for cutaneous hyperesthesia): It has been demonstrated that a triangular area, bounded by a line connecting the highest point of the right iliac crest, the right pubic spine, and the umbilicus, and back to the crest of

the ilium, was exceedingly sensitive to stimulation in 85 percent of a large series of reported cases. The test is carried out as follows: The skin is sharply pinched and slightly twisted at the point of maximum tenderness, which usually falls at the center of the triangle and never extends beyond its borders. If all three signs are positive, there should be no hesitancy in advising surgical interference.

2.—*Acute cholecystitis* is due to bacterial invasion of the gallbladder, and is characterized, first, by a mild ache under the right costal margin, which rapidly develops into an excruciating, constricting, breath-taking pain. The patient feels as though he is caught in the grip of a vise. Vomiting and a rise in temperature follow. There is usually an associated referred pain, which radiates to the right shoulder or scapular region. This is a valuable diagnostic point because of its constancy. The history of previous attacks, chronic indigestion, gas eructation, and pressure symptoms following meals, all aid in establishing a diagnosis. Digital pressure directly over the gallbladder will cause severe pain, especially if the pressure is maintained or if the patient breathes deeply. Should the patient turn on his right side, the pain will be increased, due to the pressure of other abdominal viscera on the inflamed viscus. Females in middle age are particularly affected. The sex ratio is preponderantly women—three to one.

3.—*Acute pancreatitis* occurs in less than one percent of all abdominal emergencies, and carries with it a mortality of 80 percent. The attack is characterized by an agonizing pain, limited to the epigastrium and sometimes referred to the left scapula.

The cardinal diagnostic point is the *extreme local tenderness*, and not the pain. There is an exceedingly sensitive spot just above and to the right of the umbilicus. The onset is sudden, and is accompanied by vomiting and shock. The sufferer is frozen into statueque immobility. Jaundice may, or may not, be present; however, dyspnea and cyanosis are usually marked.

4.—*Acute salpingitis* may be sudden in onset and of great severity; but the history, and the pelvic and bacteriologic examinations are usually sufficient to make a positive diagnosis.

5.—*Acute diverticulitis* occurs much more frequently than is commonly supposed. Diverticula may occur anywhere in the intestinal tract, but more especially in the descending and pelvic colon. It is often associated with obstructive lesions, such as carcinoma and stricture. The pain is similar to that of acute appendicitis, but is felt on the left side. An x-ray examination is confirmative.

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(To be continued)

# Foreign Bodies in the Appendix

(A Report of Two Cases)

By

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IT is common knowledge to medical men that foreign bodies may be found in the appendix. There is also a widely-held belief that, if they remain there, they may cause symptoms in the right lower abdominal quadrant.

There is considerable difference of opinion as

obtained with each specimen was rather meager, but the pertinent facts in each case are presented.

Case 1: A young, white Civilian Conservation Corps enrollee in an Arkansas camp, whose previous history was negative.

**History of present attack:** On August 14, 1938, about 9 A.M., he was seized with sudden, generalized abdominal pain, cramps, and nausea, and vomited once. The pain radiated to the thorax and the region of both kidneys, and continued intermittently for about 8 hours. There was no pain nor tenderness in the lower right abdominal quadrant. No laboratory findings were reported. There was no history of previous attacks. He was operated upon the same day, and an apparently normal appendix was removed.

**Pathology:** The microscopic section showed a normal appendix, in the lumen of which was an encapsulated cellular body of unknown type, about  $2 \times 2.5$  mm. (see Fig. 1). Our first thought was that it might be plant tissue of an unusual type, because it was unlike anything we had ever seen either in the appendix or in fecal material. However, to rule out helminths and immature insect larvae, we sent the slides to the Bureau of Animal Industry, in Washington. They reported that it appeared to be plant tissue. The slides were then sent to the botany division of a State University, for confirmation, but they were unable to identify plant tissue. Another State University to which it was sent stated that it "has some structure that shows plant cells. Whether it could be a very small seed or some other structure, we are unable to say, but it does not seem to be an animal parasite or animal tissue."<sup>4</sup>

These opinions are cited to show the difficulty a pathologist working with human tissue might encounter, unless he is also somewhat of a botanist. It likewise shows what difficulties are encountered by those who teach botany, unless they are also plant morphologists.

Case 2: A white girl, age 16, of Leavenworth, Kansas, whose previous history was negative, except for an attack similar to the present one, two months previously.

**Present history:** She entered hospital in Leavenworth, October 12, 1938, with a history of pain in the region of the appendix of four hours' duration. She was nauseated and vomited once.

**Physical examination:** Tenderness and slight rigidity were present over McBurney's point. Her temperature, pulse, and respiration were normal. No laboratory data were available. An operation was performed on the date of admission, but no notes are available concerning the conditions found.

**Pathology:** The gross examination was negative. This appendix, like the previous one described, contains plant tissue; however, the organ shows definite damage. The lumen is dilated and contains two definitely organized, capsulated, cellular

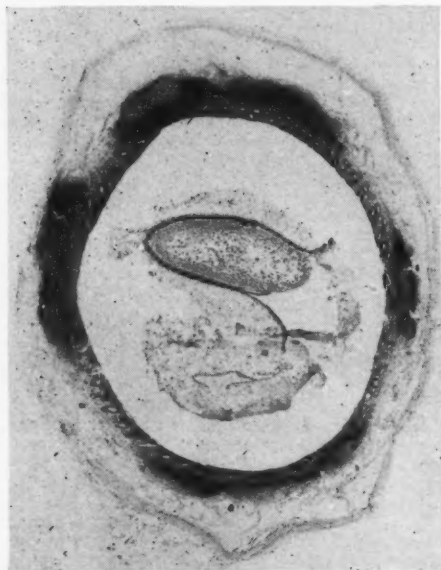


Fig. 1:—The section shows two tomato seeds (*Lycopersicon esculentum*), cut at different levels.

to whether or not small fecal concretions are an initial factor in causing appendicitis. Delafield and Prudden<sup>1</sup> say that both small foreign bodies and fecal concretions may act as important predisposing agents in inflammation and perforation of the appendix, through pressure, erosion, and subsequent invasion of the mucosa by bacteria. McFarland<sup>2</sup> states that foreign bodies are supposed to be frequent and important causes of appendicitis, but that, in several thousand autopsies, he has rarely observed them. MacCallum<sup>3</sup> claims that many of the fruit stones and seeds found in the appendix are really not stones or seeds at all, but concentrically laminated masses of fecal material. He says that these may be injurious, but quotes Aschoff, who insists that they really protect the mucosa. We do not believe that modern pathologists will agree with the last statement.

Herewith we present the findings in two cases which were seen in the summer of 1938. The history

\*Deceased April 23, 1939.



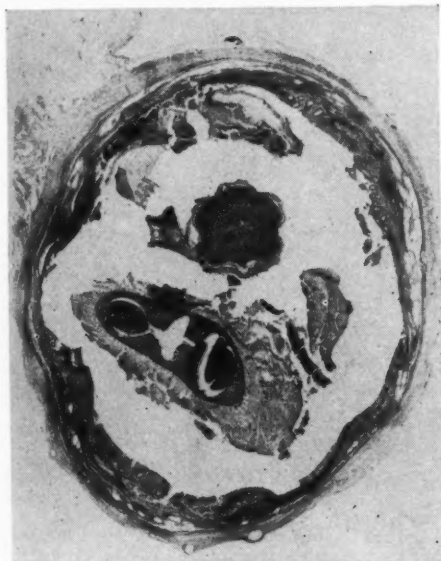


Fig. 2:—The section shows cross sections of two seeds, the longer one is a median section of a tomato seed, showing the coiled embryo. The other is a caraway seed (*Carum carvi*).

bodies, of unknown origin (see Fig. 2). There is no apparent evidence of any digestion of these bodies. The appendiceal tissue shows considerable erosion of the mucosa, with a good response toward healing. The pain mentioned in the clinical history was apparently caused by the effort to expel these bodies, the vomiting being a reflex action.

The botanists were not able to name the plant tissue in this case definitely. Slides were finally forwarded to Professor A. J. Eames,<sup>5</sup> of the New York State College of Agriculture at Cornell University, whom we wish to thank for the identification. We quote in part from his report:

"Both appendices contain seeds of flowering plants. They are in perfect condition and excellently stained. Case 1 shows sections of two tomato seeds (*Lycopersicon esculentum*, the common garden tomato). The sections are not median and do not show the embryo. Case 2, likewise shows

sections of two seeds, one large and one small. The larger seed is of the tomato. The section is median and shows well the long, slender, coiled embryo. The other body is a caraway (*Carum carvi*) "seed" (botanically, half a fruit). The section is a cross section near one end. This "seed" is the commonly used "caraway seed" of rye bread and "caraway cookies." The caraway seed, because of its sharp ends, may have caused irritation."

As all natural objects are classified as either animal, mineral, or plant, there should be little difficulty in ruling out the first two. The problem in these cases, which occurred coincidentally within two months of each other, was to name the plant tissue. We will not discuss the relation of the symptoms in either case to the condition found.

### Discussion

These cases are shown because pathologists rarely see them. We are unable to find mention of similar findings in textbooks available to us. Just what relationship the seeds had to the symptoms in Case 1, is problematic. In Case 2, the organ shows definite recent damage in the presence of the intact and apparently unaltered seeds. Hertzler<sup>6</sup> says: "Many things written about the appendix have not yet passed the stage of hypothesis. Chief of these is the so-called appendicular colic. Possibly there is such a thing, but it has not been proved. If the appendix is stretched by placing a forceps into its lumen and distending it, . . . pain is caused in the epigastrium, never in the region of the appendix."

### Summary

Two cases of plant seeds in the appendix and their relation to inflammation of the organ have been discussed. The plant tissue has been identified in both cases.

It is believed that a more careful search than is usually made in an apparently normal appendix might lead to as interesting findings as those in these cases.

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## FRAUDULENT DEMOCRACY

Much of the emotional fluttering over European menaces to American democracy is done by people who have been pushovers for the fraudulent dictum, "Communism is the ideal democracy."—CHARLES COLLINS, in Chicago Tribune.

## NO DOGMA IN MEDICINE

No man can ever hand out a rule-of-thumb method for the practice of medicine, for no work dealing with this subject in its fullest expanse can ever be dogmatic. Dogma makes for a lifelessness diametrically opposed to the vivacity and variation which is medical practice.—R. F. LAPHAM, M.D., in "Disease and the Man" (Oxford Press).

# Vulvovaginitis in Young Girls

By

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**V**ULVOVAGINITIS in children is more frequently gonorrheal in origin (the specific type), but may be due to a number of other organisms (the nonspecific type). The gonorrheal type is generally more severe and therefore more difficult to cure, but there are many exceptions to this rule, and active vaginal infections, in which the gonococcus cannot be demonstrated, are frequently as stubborn and as contagious as the definitely gonorrheal infections.

Many of these children are anemic, undernourished, and live in unhygienic environments. Schaffler<sup>1</sup> believes that intercurrent diseases, such as measles, scarlet fever, severe colds, and even fatiguing, strenuous exercise or excitement, can frequently be important underlying factors in lowering a child's resistance, and thus favor a recrudescence of symptoms or become a primary contributor in the nongonorrheal cases.

The rectum is frequently infected by the same organism as is found in the vulva and vagina, and the *proctitis* may persist after the vaginitis is apparently cured, and thus become a focus of reinfection of the vagina. Gonorrheal organisms can only rarely be recovered from the rectal smears or cultures, but the acutely inflamed rectal mucosa, frank pus, mucus, and blood in the stools and seen escaping from the anus, are clinical evidence. A history of this condition beginning about the time of the vaginal disturbance is, therefore, suspicious evidence of the rectum's being involved in the same pathologic process. In this type of proctitis, the child may have but a transient diarrhea and a slight fever, and may not complain of pain within the rectum or of tenesmus on defecation.

Sometimes the proctitis is present without any evidence of vaginitis or after the vaginitis has been relieved. The rectum should be routinely treated, regardless of the clinical findings, whenever the vaginitis does not respond satisfactorily to treatment.

*Pinworms* are present in many cases, and must be considered as occasional causative or definitely contributory factors. Observant nurses and mothers may find the worms in the introitus.

*Masturbation* produces ecchymosis, the flattened, adult type of hymen and introitus, a congested clitoris, and occasionally traumatic vaginal irritation. This low-grade vulvar and vaginal irritation, occasionally with a slight discharge, produces itching.

*Pyelitis* is very intractable in some children, and each recurrent attack is associated with vaginal and perineal irritation.

*Foreign bodies* introduced into the vagina may produce a thin, irritating discharge, acute in onset, perhaps serosanguineous in character, and generally associated with bladder irritability. Investigation with a probe, vaginal speculum, or a finger in the rectum and a probe in the vagina, will reveal a foreign body, occasionally free, but more often eroded into the vaginal wall, or perhaps encased in mineral salts.

1.—Schaffler, G. C. *et al.*: Infection of the Immature Vagina. *W. J. Surg. Obst. & Gynec.*, Dec., 1934, p. 669.

## Symptoms

Regardless of the underlying etiology, there is a vaginal discharge, varying from slight to profuse in amount, and from serous to greenish-yellow and purulent in consistency, with a tendency to crust when it dries on the skin. The vestibule and vulva become irritated and the itching is sometimes intense. The urethra is invaded in about half of the cases. The cervix and abdominal adnexa usually escape. Discharges from the rectum have been mentioned.

Because of the many complicating and confusing factors, the prognosis must always be held in reserve. No case may be discharged as long as there is even a slight redness of the vulvar or anal area, or an occasional slight, transient vaginal or rectal discharge. Recrudescence or reinfection is the common disappointment.

## Treatment

These little folk are to be treated as ambulatory patients and *should not be hospitalized*. They must, however, be kept under close observation and isolated from contact infection of others, as well as reinfection from others. The average time for cure is three months, but patients should be over-treated rather than neglected. After all clinical evidence is gone, careful inspection should be repeated once a month for a year.

Several different plans of procedure have been tried; all of them (except, possibly, the estrogens) are tedious and difficult to carry out, and relapses occur.

1.—*Antiseptics*: A 1-percent solution of strong protein silver in tragacanth jelly, or in anhydrous lanolin, injected into the vagina each night, is a most effective local application. Sufficient pressure is to be used to cause a definite ballooning and a thorough, complete, and prolonged application of the antiseptic. No harmful results attributable to absorption have been noted from the vaginal application, but argyria from rectal instillations of various silver preparations has been reported.

Brown recommends suppositories incorporating one grain of pyridium in a boroglyceride-gelatin base.

Juvenile proctitis is especially difficult to manage. A 1:1000 Merthiolate solution, instilled for retention at bedtime, is effective, but may produce systemic poisoning with severe, low-abdominal pain, headache, malaise, diarrhea, nausea, and vomiting, and its use must, therefore, be carefully watched.

The rectal instillations are to be made each evening, at bedtime, using an infant syringe, with the child in the knee-chest position.

Many other antiseptics, advocated for both vaginal and rectal use, are either too irritating, in sufficient concentration, to be clinically active, or are ineffectual.

2.—*Cold-quartz* radiation treatments, beginning with 10 seconds and increasing the length of treatment up to one minute have been recommended by some. A small cold-quartz official applicator may be introduced into the rectum or vagina and moved about to gain a more complete exposure. Painful erythema and burns may occur. It is to

be used only as an auxiliary method in ambulant treatment.

3.—The *estrogenic* treatment of gonococcal vulvovaginitis in children has added a most satisfactory variant to the use of antiseptics in this condition. Instead of attempting to destroy the gonococcus by means of chemicals, the ovarian hormone so alters the vaginal mucosa that the gonococcus can no longer thrive. By this treatment, many cases which resisted the various antiseptics are now cured. By the use of antiseptics alone, the clinical course of the disease often was a matter of from three to five months, and some cases continued until the child reached puberty.

TeLinde,<sup>2</sup> using hypodermic injections of Amniotin in oil, was able to cure 16 of 22 cases in an average time of twenty-seven days. He found, however, considerable practical disadvantage in giving daily, painful hypodermic injections to children over a period of weeks, and now uses the Amniotin in suppository form. His routine is: The mother is told to wash the vulva at the daily bath, but no vaginal irrigations or instillations are used. She is then given a demonstration of how to introduce a suppository into the child's vagina. The suppositories of Amniotin for children contain 1000 international units. In almost every instance they can be inserted into the child's vagina without difficulty. One suppository is introduced nightly, at bedtime.

The patient is examined at weekly intervals, when vaginal smears and washings are made. The washings are made with a medicine dropper and examined under low magnification. As soon as

the vagina is under the influence of estrogen, epithelial desquamation begins. At times this is so profuse as to cause the mother to fear that there is an increased amount of pus. As the epithelial shedding takes place, the vulval reddening subsides, and in a few days the smear usually becomes negative. Smears are to be stained by the Gram method, so that gonococci can be differentiated from gram-positive cocci of like morphologic structure.

After the first negative smear, the treatment is continued for two weeks, and if the weekly smears continue to be negative, treatment is discontinued. In the average case, the entire treatment extends over about one month.

A straight course of estrogenic treatment usually brings on a characteristic vaginal reaction. In children approaching puberty, there is often a premature growth of pubic hair, visible growth of the labia, and congestion of the breasts. In most cases, this abnormal sex development subsides after discontinuance of the treatment and the vaginal epithelium returns again to its immature form. It is not known yet whether really serious consequences may follow this plan of treatment. Close observers say that all children so treated seem to be developing normally. However, we must wait until they have reached maturity and borne children.

4.—The use of *sulfanilamide* has been reported, but I have had no experience with it. If this is used, it must be handled with great care. The patient must always be under close supervision. Blood counts must be made frequently, and in spite of all precautions, a number of unfortunate adverse effects may make their appearance.

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## Making a Diagnosis in the Home

By

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SEVERAL months ago, I submitted a problem for discussion in the Seminar of CLINICAL MEDICINE AND SURGERY (July, 1938).

Briefly, the case report was as follows: An elderly woman, suffering from severe pharyngitis, sinusitis, and otitis media, had gradually lapsed into unconsciousness. The physician who had been caring for her left town, so that no information was available as to her earlier condition. A clinical diagnosis of streptococcal pharyngitis, sinusitis, and otitis media was made, and confirmed by bacteriologic examination. The cause of the coma could not be decided upon at once, and it was only after some discussion that the eventual diagnosis of sulfanilamide poisoning was made.

Each of the physicians who discussed this case came to the same primary diagnosis, but not one suggested any inquiry into the previous treatment, and thus they fell into the same error from which

we luckily extricated ourselves. Up to that time, no report had been published of sulfanilamide coma, so that the presumptive diagnosis needed to be confirmed by chemical examination of the blood, which showed a fairly high concentration of the drug four days after the medicine had last been taken. The parenteral and oral administration of fluids, and sodium bicarbonate enemas, quickly restored her to normal.

For the benefit of those who asked as to what treatment was necessary for the infection in the sinuses and ear, it may be said that none at all was needed. The sulfanilamide had entirely cured the streptococcal infection, which did not recur during the following two months during which the patient was under observation. This aspect of the case confirms the clinical rule of thumb, "Those patients will be benefited by sulfanilamide treatment who show a definite reaction to it."

A number of the discussants asked for further diagnostic data, such as mastoid area roentgeno-

<sup>2</sup>—TeLinde, R. W.: Treatment of Vaginitis. *Med. Clin. N. A.*, 23:335, March, 1939.

grams, leukocyte counts, spinal puncture, and temperature and pulse readings. This information was not given because all tests were negative and it was desired that the emphasis be placed upon making a diagnosis right in the home, quickly and inexpensively.

"What medicine has the patient been taking?" is a simple question to ask, and an easy one to forget. The nervous woman with an acneform rash should not be given bromide medication, at least until she stops taking the effervescent bromide tablets that the kindly druggist sells her. The baby with the pink cheeks should not be given atropine for pylorospasm until the physician has learned whether the pink cheeks and slight fever are due to atropine poisoning. The man who suffers from intermittent coryza may be allergic to Aspirin (acetosal). Of less scientific, but definite practical importance is the fact that the physician may be spared the embarrassment of repeating some harmless medicine which has already been used by the patient, such as calamine lotion for pruritus.

How can the physician remember to ask this question, and others which are equally important? Only by having a *written* record of the history, examination, and laboratory findings, which is made *at the time*. Printing houses make up little sheets and cards, which may be taken to the house, but which contain little room for the writing of clinical facts. I have had a four-page form printed by a local printer (cheaper than those made up elsewhere), which contains a list of pertinent points (medicine, tobacco, alcohol, sleep, laxatives, type of work, exercise, rich foods, and temperament, followed by a list of symptoms, grouped under their respective organs), so that there is a constant reminder of diagnostic pointers. If this form had been in the bag, as it should have been, the case could have been solved earlier.

I have noticed that physicians, who are very thorough in their office histories, make home calls and do not keep full records of their findings, thus further handicapping the value of the limited examination obtainable in the home. On several occasions, when another physician was called in for consultation, he could not grasp the entire problem, because his mind could not evaluate a large group of facts.

At about this point, someone will say, "The old-fashioned clinicians could make a diagnosis without all this fussing." To clarify this point, look through any book on differential diagnosis written 25 years ago. R. C. Cabot's masterful "Differential Diagnosis" was a landmark of its time, yet today a senior medical student can pick a dozen flaws in the reasoning and facts presented. At that time,

a diagnosis was made because the disease in question was the only one that could not be ruled out easily (diagnosis by exclusion) from a list of possibilities suggested by the history or physical findings. Today a diagnosis must be made from *positive* facts, where this is possible.

The most obvious defects of diagnosis by exclusion are: (1) The physician may not include every disease which should be considered; (2) the correct diagnosis may be excluded, because of improper reasoning; and (3) the disease may be unknown to medical science at that date.

Illustrative cases come to mind: A farmer of 32 years began to suffer from pain behind the sternum, nausea, and vomiting. The pain persisted, in spite of treatment for indigestion. The patient was taken to an older clinician, who made a careful fluoroscopic examination of his heart and lungs, then administered a barium meal and watched it under the fluoroscope. As nothing abnormal was found, the patient was about to be dismissed, despite the continuance of the pain, when the technician announced that the leukocyte count was 28,000. A prompt laparotomy disclosed a gangrenous appendix. There had been no abdominal tenderness, *because the appendix was in an abnormal position, up under the diaphragm.*

Patients afflicted with *narcolepsy* have consulted many physicians. The diagnosis they have received varied from the simple (and usually wrong) one of "neurosis," to focal infection and chronic meningitis. If the physicians concerned had *written down a complete list of the causes of abnormal sleep*, narcolepsy could have been diagnosed very readily.

It is unfortunate that the average general practitioner rarely refers to his texts on diagnosis. Unless another physician checks over his cases constantly, or unless he reads over the patient's histories at night, he will fail to diagnose properly at least 25 percent of his cases. If this seems like a large percentage, remember that, in previous articles (*Iowa State Medical Journal*, March, 1937; *CLINICAL MEDICINE AND SURGERY*, June, 1937), the average diagnostic error was computed at 20 percent; and that, even in University Hospitals, one case out of each ten is misdiagnosed.

### Summary

1.—A *complete record* should be made of the history, physical examinations, and laboratory findings obtained from each patient, whether he (or she) is examined in the home or the office.

2.—*Ask* the patient what medicine he has been taking.

3.—*Think* of all diagnostic possibilities, and beware of making a diagnosis solely by exclusion.

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*In addition to strict and constant supervision by the states, the Securities and Exchange Commission is putting the insurance companies through their paces.*

*We, as policyholders, have a right to insist that there be no playing of politics with our hard-earned savings, no sabotage of vital assets upon which depend our peace of mind in the present and our comfort in years to come, no exploitation of economic theories by persons other than the policyholders, whose money does not belong to the Government nor to theorists advising the Government.*—P. W. WILSON, in *The Commentator*, Apr., 1939.

# Physical and Office Therapy and Radiology



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## Electrosurgical Cervical Conization and Amputation

By

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A CONSIDERABLE amount of literature has accumulated since Hyams first introduced conization of the uterine cervix. This stands, today, as one of the most valuable minor procedures in gynecology, adaptable, in degree, from the small erosions present in virgins (which usually result from nervous hypersecretion, leading to irritation and maceration of the mucosal lining and resulting in infection of the gland-bearing tissue), to the long-standing cases of swollen, boggy, lacerated, eroded cervixes, studded with numerous nabothian cysts and giving rise, in addition to the distressing, irritating leukorrheal discharge, to backache, sterility, pelvic pain, erratic bleeding, dyspareunia, arthritis, cystitis, fatigue, and perhaps becoming the direct primary cause and the activating focus of a chronic pelvic inflammatory process.

When it occurs in virgins, and also in cases of small cervical erosions in general, this procedure may be limited to simply coning out the endocervix, whereby a thin portion of the lining membrane of the cervical canal is removed with a turn of the Hyams electrode. In the advanced cases of cystic, lacerated endocervicitis, by the use of special firmer, triangular-shaped cutting electrodes, it is possible to remove as much cervix as could be removed by a radical Sturmdorf amputation, and still be within the scope of office surgery. Thus we can well adopt the urologic term for prostatic resection and speak of this procedure as an electrosurgical cervical conization or amputation.

### Indications

For the past seven years I have used conization and electrosurgical cervical amputation as an office procedure exclusively. The indications for which I have applied and found this procedure valuable are as follows:

1.—Cervical erosion in the nullipara as well as the multipara, associated with the chief complaint of leukorrhea, together with the associated symptoms of pelvic inflammation, backache, and other focal symptoms due to the infected "pelvic tonsil."

2.—Sterility where cervical erosion is present, although leukorrhea and other signs of cervicitis are not predominant.

3.—Erosions and chronic cervicitis following childbirth. A large number of these women present evidence of a cervical erosion at the end of the sixth week postpartum, yet if treated conservatively, with applications of silver nitrate, 10 to 20 percent, ichthyl-glycerin (33.3 percent ichthyl in glycerin) tampons, and daily hot douches, most of these lesions will heal, and those that persist will be greatly reduced and easily taken care of by conization that will require the removal of but a small amount of tissue. I feel that conservative therapy for the postpartum cervix should be the method of choice, and electrosurgery reserved for the lesions found present at a six-month postpartum checkup.

4.—Where other pelvic symptoms predominate, such as pain, backache, cystitis, erratic bleeding, dyspareunia, tubo-ovarian disease, etc., and an associated cervical lesion is found, it should be taken care of. This procedure must never be used in the presence of acute pelvic inflammation, without first preparing the cervix. The infected cervical glands often harbor virulent streptococci, as well as other bacteria which may activate a latent pelvic inflammation or cause fatal peritonitis, if an electrosurgical procedure is carried out on an infected cervix. I use silver nitrate applications, ichthyl-glycerin tampons, and hot douches to clear up the visible cervical infection and swelling, supplement-



ing this with pelvic diathermy applications and foreign protein injections, if a painful pelvic exudate is present. Where the visible cervical infection is greatly reduced and the painful exudate in the pelvis is disappearing, I feel that the diseased endocervical tissue may be removed with safety.

5.—As an adjunct to pelvic surgery, a source of pelvic focal infection may be safely dealt with and the patient placed in better condition for an elective pelvic operation. Where a hysterectomy is contemplated, radical removal of the endocervix



Fig. 1: Showing the speculum in place, with the active pole of the surgical diathermy machine attached by a spring clip (lower right).

will minimize a latent danger of cutting across an infected cervix in doing the easier supravaginal operation, and increase the indications for this operation. The endocervix can also be removed where leukorrhea is present in an infected, lacerated, or eroded cervical stump after supravaginal hysterectomy, and thus remove the infected "pelvic tonsil," as well as obliterate the remote danger of malignant changes occurring in the retained cervix.

#### Contraindications

The contraindications to the removal of the endocervix and electrosurgical cervical amputation are:

- 1.—Acute or latent pelvic inflammation.
- 2.—In the presence of active vaginal inflammation due to gonorrhea or trichomonas vaginalis, any procedure applied to the cervix which may appear eroded and infected will be futile. The vaginitis must be cleared up by specific means, and the cervix treated secondarily at a later date.
- 3.—If an erosion is found associated with pregnancy, it should be treated conservatively until after delivery.
- 4.—In women where long-standing erosions make one suspicious of malignant change, the removed tissue should be placed in Zenker's or 1-percent formaldehyde solution and turned over to a competent pathologist for microscopic study in every case.

#### Procedure

I have been carrying out my electrosurgical technic by using a chrome vaginal speculum as the inactive electrode, the connection being made

to the surgical diathermy machine by a spring clip (see Fig. 1.). This greatly facilitates the procedure, as the heat produced in the tissues is directly proportional to the resistance, thus the greater the distance between the electrodes the higher the resistance of the tissues, and therefore the higher the voltage required for carrying out the conization. By eliminating the large sacral or abdominal pad used as an inactive electrode, and substituting the vaginal speculum, the tissue distance, as well as resistance, is greatly decreased, thus requiring less voltage and thereby producing less heat when efficient cutting is being done. Occasionally the active cutting electrode will touch the inactive speculum and produce a spark; however, the metal surface absorbs the heat so produced and burns never result.

Topical anesthesia with 10-percent cocaine solution may be used in these cases, but will not eliminate pain entirely, because of the depth of the cut and the formation of some steam, due to tissue dehydration. The steam produces pain directly above the symphysis pubis, such as is typical of menstrual colic. The patient is told that she will encounter several severe menstrual cramps which will last but a few seconds, and these she will endure, if forewarned. The pain is most in evidence when the tissue near the internal os is approached; thus, in extensive amputations, the base of the cone can be well cored out by manipulating the electrode, and the apex left for the last "cut."

The first week after menstruation is mentioned as the best time for carrying out this procedure, since secondary hemorrhage is apt to occur only when the greyish slough separates, in from 10 to 14 days, and this period should not be made to fall in the premenstrual or menstrual phase, when cervical congestion is at its height.

Free bleeding is controlled before the patient leaves the table, by shifting over to the coagulation current and gently touching the hemorrhagic areas with a coagulating needle. One must always bear in mind that stenosis is a complication of cauterization and coagulation, but usually does not follow cutting.

I feel that a tampon should not be used until the slough separates, because the profuse, foul, watery discharge which is present should be allowed to drain off freely.

I give instructions to all patients regarding what to do if they should start to bleed in from ten days to two weeks (the time of separation of the slough). They are told to saturate a large pledget of hospital cotton in water as hot as can be tolerated, to insert this into the vagina, and to lie down in bed with the thighs close together. This simple measure has controlled several cases of late hemorrhage, and is supplemented the next day by an application of 30-percent silver nitrate solution to the bleeding point.

Beginning the second week, the granulations in the canal are touched with silver nitrate and an ichthyl-glycerin tampon is inserted for 24 hours. A daily cleansing douche is used from the first day and continued until healing takes place, in from four to six weeks.

Stenosis, as a complication, has not as yet been encountered in my practice from conization or electrosurgical amputation, although I have previously seen it as a complication following coagulation. Stenosis, as a rare complication, must be

expected to occur at some time, because some patients have a tendency to heal with excessive scar tissue, as shown in other parts of the body. I feel that to dilate the cervixes of these patients routinely, after healing has taken place, is bound to traumatize the newly healed canal, especially at its narrowest part, the internal os, thus producing fresh trauma which is apt to lead to additional scar formation.

In conclusion, let me stress the importance of *preliminary preparation* in these cases, together with the simplification of technic in using the vaginal speculum as the inactive electrode, which makes this a simple office gynecologic surgical procedure, satisfactory to both the patient and the physician.

445 Union Trust Bldg.

RICHARD KOVACS, M.D.

New York City.

## \* Notes and Abstracts \*

### The Scope of Physical Therapy\*

MANY PHYSICIANS do not realize the widespread possibilities in the use of physical therapy or the many methods of application. The various types of physical therapy may be listed thus:

- 1.—*Electrotherapy*
  - A. Galvanic current—electrophoresis and electrolysis.
  - B. Low-frequency currents—electrodiagnosis.
  - C. High-frequency currents—electrosurgery.
  - D. Static electricity.
- 2.—*Light therapy*
  - A. Photothermal radiations (visible and infrared rays).
  - B. Photochemical radiations (ultraviolet rays).
  - C. Heliotherapy.
- 3.—*Hydrotherapy*
  - A. Hot and cold baths.
  - B. Medicated and electric baths.
  - C. Whirlpool and therapeutic pools.
  - D. Enemas.
- 4.—*Mechanotherapy*
  - A. Massage.
  - B. Assistive and resistive exercise.
  - C. Corrective exercise.
  - D. Occupational therapy.

It behooves every practising physician to learn in what conditions he might utilize physical therapy methods to good purpose. He should also learn what simple physical measures he can safely apply or prescribe for home use. *He should not rely too much upon the aid of a technician*, for it should be axiomatic in the practice of medicine that no physician should ever expect his technician to perform diagnostic or therapeutic procedures which he himself cannot carry out properly.

Among the many conditions in which physical measures prove of definite value are: traumatism, both acute and chronic; the various forms of arthritis and the rheumatic states; many kinds of paralysis and other organic and functional disorders of the nervous system; chronic digestive disturbances; chronic diseases of the heart and blood vessels; acute and chronic inflammatory conditions of the genital tract, nose, and throat; and many skin lesions.

Minor electrosurgery has proved a very satisfactory method for removing new growths and dis-

\*"Electrotherapy and Light Therapy" (Lea & Febiger Co.).

eased tissue, while major electrosurgery, in the hands of progressive surgeons, has made possible important advances in operative technic.

### Diathermy in Bursitis of the Shoulder

IN acute bursitis of the shoulder, diathermy, either conventional or short-wave, is the best agent. In using the former, the electrodes are placed about the middle third of the humerus and the middle third of the clavicle, giving the treatment for 45 minutes. With short-wave diathermy, the duration of treatment is reduced to about 20 minutes, with the electrodes in the same position. The shoulder should *not* be fixed to the chest with plaster or adhesive tape.—A. A. MARTUCCI, M.D., in *Arch. Phys. Ther.*, Oct., 1938.

### A Method of Obtaining Clear Kidney Roentgenograms\*

IF possible, the patient is instructed to take a laxative 24 hours before roentgenography, to eliminate gas and fecal matter from the colon. Castor oil is the most effective. A preliminary roentgen-ray exposure of the kidneys, ureter, and bladder is then made, for comparison with later films. If gas in the colon obscures a portion of the urinary tract, the patient is given a cleansing enema, followed by the injection of prostigmine or pituitrin.

The arm band of a blood pressure machine is folded snugly upon itself so that a rectangle 7 by 5½ inches is formed. With the patient lying straight upon the x-ray table, the folded arm band is laid transversely on the abdominal wall, so that the inferior border reaches the pubic bone. The compression band of the roentgen ray machine is brought snugly across the blood pressure arm cuff and the urographic medium given intravenously. Immediately thereafter, pressure in the arm band of the sphygmomanometer is raised to from 70 to 110 mm., varying in intensity with the body build of the patient, and is maintained for 15 minutes.

Such pressure is enough to obstruct the ureters as they cross the brim of the bony pelvis, and allows the urographic medium to collect in the kid-

\**Journal-Lancet*, Feb., 1939.

ney pelves and upper ureters. The first film is exposed from 5 to 10 minutes after completion of the injection of the dye. If good visualization has been obtained, further films are taken and the pressure released. If not, a second film is taken 15 minutes after the injection is completed, and still a third 20 minutes afterward. A final picture is taken within a few seconds after the pressure is released.

L. L. HOWARD, M.D., F.A.C.S.  
Great Falls, Mont.

### Fever Therapy in Chronic Lumbar Myositis

**F**OLLOWING injuries to the lower back, many patients return to the physician complaining of chronic pain in the lumbar area. Virtually all cases which do not recover within from three to five weeks, enter a prolonged period of disability. The true diagnosis then becomes evident, in that the condition is of a rheumatic nature, rather than a simple strain. The outstanding symptom, in many cases, is a more or less continuous, mild fever (99° to 100° F.), of which the patient is often not aware.

These methods of treatment have been used: Heliotherapy, heat and massage, stretching of the muscles under an anesthetic, colonic irrigations, vaccine therapy, Obe's fasciotomy, and hyperpyrexia. I have found that hyperpyrexia frequently relieves the pain and occasionally cures the disease.—H. B. SHORBE, M.D., in *Arch. Phys. Ther.*, Feb., 1939.

[Although not a cure-all, the injection of procaine or Nupercaine into the acutely painful muscles will relieve pain and permit the patient to stretch his own muscles. Steinbrocker, of New York, thinks that such injections break up the pain cycle and are curative in themselves.—Ed.]

### Short-Wave Treatment of Sinus Exophthalmos

**I** HAVE seen several cases of unilateral exophthalmos which disappeared after adequate therapy for the causative sinusitis. Short-wave diathermy over the sinuses, together with injections of colloidal manganese, were employed with good results.—S. PERN, M.D., in *Med. World*, Jan. 13, 1939.

### Routine Roentgenography before Every Major Operation

**T**HE medical profession should insist that, at least, a lateral roentgenogram of the head, a postero-anterior roentgenogram of the chest, and a roentgenogram of the pelvis should be taken routinely before every major operative procedure, regardless of the patient's age and of whether or not a malignant condition is present.

Various articles dealing with metastatic processes have mentioned a higher incidence of skeletal and pulmonary manifestations since the advent of thorough roentgenographic studies.—M. J. HUBENY, M.D., in *Radiol.*, Dec., 1938.

### Physical Therapy in Fractures

**S**OME workers are opposed to the use of short-wave treatments over a recent fracture, because of experimental observations.

The factor of unknown dosage common to short-wave units, and the fact that actual tissue damage has been done following the application of intense heating, I am unable to escape the conclusion that the short-wave treatment of fractures must be used with extreme caution. I prefer to use an infrared lamp for 4 one-half-hour treatments during the day. The skin surface is cooled at intervals of five minutes during the infrared treatment, so that the muscles will be left in a tonic state, rather than in an atonic one.—T. P. BROOKES, M.D., in *Arch. of Phys. Ther.*, Jan., 1939.

### Treatment of Peripheral Vascular Disease

**H**EA.T, applied anywhere to the body, results in vasodilatation and increased blood flow. One method is to apply paraffin casts to the extremities not affected, so that reflex vasodilatation takes place in the affected members, while the latter are undergoing intermittent compression with sphygmomanometer cuff, suction-pressure boot, or other treatment. DeTakats suggests that a large heat cradle be placed over the entire body, as a simpler and cheaper measure.

The paraffin cast is applied thus: The extremity is inserted into the bath up to mid-thigh or mid-arm, and coated with six to eight layers of a mixture of 12 ounces of paraffin oil to one pound of solid paraffin, heated to 110° F. Waxed paper strips, three inches wide, are then wrapped around the paraffin, followed by gauze or elastic bandage. Such treatment is also used in varicose ulcer or phlebitis treatment, to keep the skin soft.—S. SEDWITZ, M.D., in *Arch. Phys. Ther.*, Mar., 1939.

## ★ Books ★

### Applied Physiology of Exercise Lipovetz

**APPLIED PHYSIOLOGY OF EXERCISE.** By FERD JOHN LIPOVETZ, Author of, *A Recreation and Sports Handbook for Playground, School, Community and Camp; Class Room Relief Drills and Physical Education. Lessons, etc.; State Teachers College, LaCrosse, Wisconsin.* Minneapolis, Minnesota: Burgess Publishing Company, 1938. Price, \$3.25.

**L**IPOVETZ has compiled an interesting study of the anatomy and physiology of exercise, together with its practical applications. It would be well for all students of physical education and for athletic coaches to read this well-written presentation of modern facts on exercise.

The author has compiled his facts from standard, authentic medical references. Despite the tremendous mass of facts, the text is readable and interesting.

As he states, there is much unemployment among graduates of high-standard physical education schools, because they are but little superior to the graduates of commercial or "athletic team" schools. The remedy: Increase their scientific background so that they will become more than teachers of athletics, but rather builders of better bodies.

# *A Living for the Doctor*

## **The Business of Medicine and the Art of Living**



*Associate Editor:* Ralph L. Gorrell, B.S.M., M.D., D.N.B.

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### **The Wagner Health Bill**

**B**USINESS is disorganized and uncertain. Industry is bewildered. Agriculture faces staggering losses. Labor is restless, jobs are insecure, and twelve million remain unemployed. Out of just such economic disorganization came dictatorships and tyranny for Italy, Germany, and Russia. In the United States, foundations are already laid for steps leading to dictatorship.

In February, Senator Wagner introduced the National Health Bill. It is by far the most dangerous piece of legislation that has been offered to Congress.

Whether the Wagner Bill is pressed for passage at this session of Congress is of relatively small importance. It is the opening gun for a fight that will be carried through 1940. For eight months, preparations by movies, radio, and other means of propaganda, including the criminal prosecution of medical associations and physicians, have been under way. The attempt has been made to create the impression that American medicine is inadequate; that a crisis in medical care is imminent; and that the situation can be met only by discarding self-reliance and self-help and substituting for them State Medicine.

The American Medical Association was haled before a Federal grand jury in Washington and accused of criminally infringing the anti-trust laws. Mr. Arnold released to the press and resulting widespread publicity a statement implying the guilt of the Association. One of his assistants made speeches from public platforms stating that the Association and its officers were criminally guilty (See *CLIN. MED. & SURG.*, Mar., 1939, p. 136). The Association and its officers were subjected to income tax investigations. On December 21, 1938, presumably influenced by the propaganda of the Department of Justice, the Grand Jury voted indictments against the Association and nineteen physicians.

In the meantime the Association was threatened with the withdrawal of Income and Social Security tax exemption—as a non-profit, scientific, educational foundation—possibly retroactive for a period of ten years.

Then, facing these defendants with the possibility of ruinous taxes, jail sentences, and heavy fines. Mr.

Arnold was in a position to say to them: "If you will do what I tell you to do; agree to refrain from doing what I do not want you to do (concessions far beyond illegal practices) I will ask the court to enter a decree, dismiss the case, and you will not have to go to jail or pay a fine."

*The doctors refused to consider the proposal.*

This means that, if associations and individuals can be coerced on such a basis into concessions "far beyond illegal practices," every association and business can be placed under executive control, regardless of existing practices, statutes, or Constitutional rights. This pierces the heart of the enterprise system, and it is the most sinister menace that has confronted business and industry in the United States. It seeks to seize control by the blackjack method of threat and coercion.

The subtle and adroit National Health Bill does not provide for any new federal agency. But in its unregulated grant of power and its authorization of expenditure without limit, it is as dangerous a piece of legislation as has ever been proposed in Washington. It is vague, wasteful and unscientific. In some respects it is so simple as to appear innocuous. Its grants-in-aid to individual states for specific purposes are, in effect, pre-dated blank checks upon the future.

On the basis of the administration's billion-dollar thinking and expenditures, the actual appropriations do not seem unduly large, but each section carries provisions for unlimited expenditures—once the machinery is established. On the basis of the rate of progression established, the total cost would exceed Two Billion Dollars in 1945, with *no limitation on expansion*.

Every dollar of State expenditure for medical services would be subject to the approval of some Federal department or Bureau—Labor or Treasury Departments or the Social Security Board. And the larger the State outlay, the more can be expected from the Federal Treasury.

#### **Everything Free**

The purpose of the Bill is stated as follows: "It shall be the objective and ultimate goal of the department to improve and maintain the health

of the people of the state and to render, free of charge, *under rules and regulations to be prescribed by the department*, all medical, surgical, dental, and nursing care and treatment, and all other services and facilities known to science and designed or adapted for use in all cases of sickness, accidents, and childbirth, to and for residents of the state, including free transportation to and from hospitals, maintenance in hospitals, and furnishing and supplying without cost of medicine, drugs, and all medical, surgical, dental, and pharmaceutical supplies and appliances required or deemed advantageous for the care, treatment, recovery, and rehabilitation of a sick or injured person."

"In the event an insufficient number of persons elect to become members of the staff pursuant to this section, within one year after this section as hereby amended takes effect, any additional number of staff members shall be procured by aiding students and prospective students to obtain the necessary training, experience, and qualifications at professional schools and colleges, with a financial subsidy of not to exceed one thousand dollars per annum to each such student *who will agree, upon graduation from such school or college, to elect to become a member of the staff, subject to the terms and provisions of this chapter and the rules and regulations of the department, for a period of at least three years.*"

#### Physicians or Politicians

This Bill makes Medicine a state utility. It reduces the practicing physician to the status of a political henchman. It warns him that, if he is dissatisfied or protests, the taxpayers' money will be used to subsidize new men, trained to a proper subservency to political overlords.

Stark and cold, this is the prospect emanating from the innocent-appearing Wagner National

Health Act. It is inconceivable that this Goldstein bill can be enacted—at this time—in Albany. However, it has tipped the hand. It has provided a pattern for legislation for the thinly populated, low-income states. For every \$1,000,000 of their own money put up they can secure from the Federal Government \$2,000,000 that has been wrung in taxes from citizens in more densely populated centers. With such funds available political machines can be built that would maintain bureaucracy in perpetuity. As to how control of the United States Senate might be secured indefinitely, one need only recall that one sparsely settled, low-income state has two Senators—as many as New York, or Illinois.

American Medicine needs no defense. It has conquered typhoid and typhus, smallpox, diphtheria, and other scourges of past generations. It has given us the lowest death rate and the longest span of life of any country in the world.

*It just happens that the Doctor occupies a position that makes him potentially the most effective of political agents.* It has been said that at some time "a doctor" enters every home. He enters it during a period of emotional stress. His relationship is a confidential one. It is true. If you make him dependent for his livelihood on the whims and fancies of City Hall or County Court House satellites, he cannot help but sing the praises of his benefactors.

*The Wagner National Health Bill must not be allowed to pass!* Now is the time to act. If, six months before the Wagner Labor Relations Act was driven through Congress, the public had been aroused to the significance of its provisions, no such one-sided law could have been enacted. *Now* is the time for nation-wide educational efforts on the questions involved in the Wagner National Health Bill.—NATIONAL COMMITTEE TO UPHOLD CONSTITUTIONAL GOVERNMENT.

## ★ Notes and Abstracts ★

### Portrait of a Physician\*

MARCH wind and sunshine flooded the long front porch. "Just right for a snapshot," I thought. And so I opened the office door, called back to the consultation room; and presently, one hand resting on an adjacent concrete pillar, the kindly acquiescent old doctor posed for me on the steps outside.

An incident of years ago, that casual snapshot still epitomizes for me the best that men in all ages and all lands have learned about their medical brethren. Eighty-one winters—fifty-five of them spent in care for the hurt and ailing—had whitened his hair, but done little to alter his spare, six-foot stature, or slow his even step. Much they had done, however, to deepen the kindness in the keen, blue eyes; and to increase the gentleness of hands always gentle from the beginning. Fittingly, perhaps, strong porch shadows veiled the doctor's

name on the glass panel behind him; but significantly, bright sunlight just underneath it boldly emphasized the single word OFFICE.

Certainly, if any office deserves letters of gold for such passing tributes as this, it is the physician's. An office at once idealistic and practical; selfless; scientific; singularly uncelebrated; yet in many an honest opinion, nearest to being the acme of helpfulness of any calling that men can practice. Through the dearest night-hour or heaviest down-pour—over the longest stretches of country mire and to the meanest hovel of a farmhouse—I have seen this faithful follower of Aesculapius hurrying to the summons of pain, sorrow, and anxiety. And I have seen, too, the radiant smile of relief kindled at countless lamplit doors by some watcher's cry of "Mary, the doctor's here!"

Not long after, at eighty-three, my old physician friend found another Lamplit Door waiting for him. But it did not find him idle: he was still writing prescriptions for patients he could no longer attend in person. And it seems good to remember the fact now—not for himself alone, but

\*Reprinted and adapted by courtesy of Marshall Field & Co.



for the profession he so jealously upheld throughout a long and diligent life. Wealth he did not have; but a whole county mourned at his graveside. No institution perpetuates his fame; but thousands in the town of his lifelong practice still affectionately speak his name.

Medicine, in the half-century span of the old doctor's service, made mighty strides. Each one brought him joy. And when, shortly before his last and only major illness, I asked him whether, had he his life's way to retravel, he would study Medicine again, he smiled. A rather superfluous question—to him. "Son," he said, "I would never study anything else!"—"CALEB."

State Medicine is poorhouse medicine.  
Tell your patients.

### Invasion by Ideas

IDEAS are the most dangerous of all weapons, for nobody has yet found an adequate defense against them. It is much easier to poison a reservoir of water, or a human mind, than to get the poison out.

Our people are still patriots. Pictures of war's new horror has made them afraid, but they would still fight to save their country from an invader. In fact, they are almost a unit in approving the plan for greater armament. They wish to be secure, whatever the cost.

Yet the sad truth is that we *have been invaded*, and are being invaded, and people are not fighting to save their country. They go about their affairs in fancied security because the enemy's weapon is invisible.

Those who are determined to destroy our institutions are not at all likely to send navies and armies against us. Unprepared as we are, they know they could not conquer us by force.

Why should they try, when the new way of conquering is so much easier and cheaper and more effective? Why attack a nation if you can persuade it to destroy itself?

We may discount the hysteria of extremists, yet the fact remains that we are being divided into classes as never before—that racial, religious, and economic groups are placing class above country—and these alien, invading ideas are responsible for it.

We can fight them now, at small cost, or later at great and tragic cost.—ROBERT QUILLEN, in *Fountain Inn Tribune*.

### Who Pays?

The telephone bills paid in 1937 each concealed an average of \$9.91 in taxes.

One-sixth of the electric light bills went for taxes.

In the price of a bottle of milk of magnesia there were 94 manufacturers' taxes and 68 retailers' taxes.

The sales slip for a cotton dress covered 125 taxes.

Fifty-two taxes were included in the price of a loaf of bread.

A pair of overalls carried 148 taxes.

Hidden taxes follow one even to the grave.

There are 167 taxes involved in dying. These do not include some 40 taxes paid in florists' bills and twice that number included in the charge for publishing the death notice.

No matter who takes the ride, the ultimate consumer pays the fare.

"Taxes are paid in the sweat of every man who labors" is a true saying.—*Patchwork*.

### Telling the Patient\*

A NEW APPROACH to the old problem that confronts all physicians—should the patient be informed of the presence of an incurable disease?

I say to the husband or wife of a patient with a hopeless cancer, "Here you are—two persons who for forty years have been lovers and the closest of friends and confidants. You have shared every joy and have borne together every sorrow that has come to you during those years, and now, when the deepest sorrow of all has come to you, why shouldn't you two talk over this problem, this great danger facing you both, and this probable departure of one of you on a long journey, as frankly and bravely as you have talked over everything else? Why shouldn't you go hand in hand, even to the brink of the grave?"

Actually, when the physician lies with the best of motives, he is often a clumsy bungler who fails to convince; or, if he does a fair job of deception, along comes an intern, nurse, or relative to let the cat out of the bag.

Every patient cannot be told. If the patient shows that he or she does not want to hear the truth, or if he asks no questions, then the physician will do well to say nothing; but if an intelligent, well balanced man or woman with a carcinoma asks for such information as will help him or her in making a decision as to surgical intervention, the physician should give it, if only because the patient is paying for an opinion and has a right to an honest one.

MILDRED WALKER

### Health Insurance: The Physician Is the Insurer

THE administrators of health insurance are much concerned about making their budget balance. They tell the physician, as in England, "We will pay you \$2.25 a year for each person who selects you as his family physician at the time he is insured." The selection is generally not made at the time the illness occurs, but at the time the person enters the insurance system, so *the physician becomes the real insurer*. He has accepted the stipulated amount for an unknown amount of service during the year.—J. G. CROWNHEART, in *J.A.M.A.*, Apr. 15, 1939.

### Give the Patient Something

GIVE the patient something to take home—a bandage, a prescription, or what not; have him carry out a list of orders, and then have him bring something back. My patients, even those of high intelligence, resent paying a fee for an opinion without getting anything.—JOHN O. POLAK, M.D.

\**Am. J. Dig. Dis.* (Review of "Dr. Norton's Wife"), April, 1939.

# The Seminar



(NOTE: Our readers are cordially invited to submit fully worked up problems to the Seminar and to take part in the discussion of any or all problems submitted.)

Discussions should reach this office not later than the 5th of the month following the appearance of the problem.

Address all communications intended for this department to The Seminar, care CLINICAL MEDICINE AND SURGERY, Waukegan, Ill.)

## Problem No. 4 (Diagnostic)

Presented by P. F. Whitaker, M.D.,  
Kinston, N. C.

(See CLIN. MED. & SURG., April, 1939, p. 191)

**RECAPITULATION:** A 40-year-old jeweler, who had had "sleepy spells" for 15 years, developed practically constant, and sometimes severe, pain in the left occiput, radiating to the frontal region. This persisted for 7 months. He appeared listless.

A careful examination, including x-ray studies of his teeth and sinuses and an eye examination by an oculist, showed no abnormalities save dryness and roughness of his skin.

Microscopic, serologic, and chemical tests of his blood, and careful studies of his urine, stools, and gastric and cerebrospinal fluids, showed no definite abnormalities.

**Requirements:** Suggest a tentative diagnosis, giving reasons, and the further studies you would make to arrive at a definite diagnosis.

Discussion by W. Herington, M.D.,  
Green City, Mo.

All the necessary laboratory work seems to have been done.

The patient being a jeweler, who constantly used his left eye with the loupe, I am of the opinion that his trouble was *eye strain*, because of the pain being in the occipital region and radiating to the frontal region. There surely was no malignancy, as it was of too-long standing. Tumor could be ruled out because headache tablets gave some relief.

I believe that, if this man changed his occupation to one where he would not be required to use the eyes constantly, he would steadily improve and eventually recover.

Discussion by David O. Gorlin, M.D.,  
Queens, N. Y.

I believe that a tentative diagnosis of *Addison's disease* is a likely possibility. The history of sleepy attacks, the dryness of the skin of the extremities, and the blood-sugar findings point a suggestive finger at this diagnosis.

There are several points lacking in the work-up; first the blood pressure findings. Addison's disease,

coupled with hypertension, may give a quite normal reading, however.

X-Ray studies of the sinuses, the skull, and the cervical vertebrae are also indicated. Sphenoidal sinusitis, particularly, often causes occipital headache. Tumors must be looked for.

I would suggest studies of the basal metabolism, and a therapeutic trial with adrenal cortex extract.

Discussion by R. L. Gorrell, M.D.,  
Clarion, Pa.

The diagnosis of a headache may be a very simple or a very complicated process. The simplest method of procedure is to attempt to classify the causes into groups, for better study.

### 1.—Headache due to local causes

- A. Sinusitis
- B. Eye strain; diseases of the nose, teeth, or ears.
- C. Migraine
- D. Neuralgia, neuritis, myalgia, wearing of tight hats
- E. Increasing intracranial pressure (tumor, chronic subdural hematoma)
- F. Syphilitic headaches
- G. Post-traumatic headaches

### 2.—Headaches due to systemic causes

- A. Uremia, in any form of nephritis
- B. Arteriosclerosis with hypertension
- C. Chronic lead poisoning
- D. Anemia
- E. Toxemic (acute fevers, malaria, gout, diabetes, alcoholism, constipation, rheumatism)

### 3.—Functional: Anxiety is the most common cause of headache.

Practically all local causes of headache seem to be ruled out in this case, although increasing intracranial pressure may not be readily diagnosable early. In this connection, it might be remarked that the establishment of a diagnosis of local disease does not mean that the disease is the cause of the headache.

A man of thirty complained of frontal pains, was found to have a mild, chronic sinusitis, and was treated by the Proetz method. Relief was obtained, for a short time only, after each treatment. A neurologist made the diagnosis of brain tumor, and exploration revealed a sarcomatous neoplasm (hemangioblastoma).

Systemic causes have been well studied, although there is no mention of business worries or other causes of anxiety. "Sleepy attacks" might represent narcolepsy, which may be readily relieved by Benzedrine (amphetamine) Sulphate tablets. A "dry, rough skin" suggests a deficiency disease, notably vitamin A deficiency and hypothyroidism. Any patient with a rough, dry skin may be given trial doses of thyroid extract, beginning with  $\frac{1}{2}$  grain daily, as the symptoms of hypothyroidism are bizarre and all types of symptoms, ranging from partial deafness to pains in the joints and extremities, are complained of.

If the therapeutic test proved successful or a basal metabolism test indicated a marked lowering of the metabolic rate, hypothyroidism may be designated as the cause of the headache. Such a diagnosis should be carefully checked, because myxedema as a cause of headaches is rare. Several works on diagnosis do not even mention hypothyroidism as a rare cause.

A dull, boring headache, with drowsy attacks finally terminating in coma, may be caused by chronic subdural hematoma, the result of an injury many months or years previously, which has usually been forgotten. The hematoma tends to increase in size and to cause increasing symptoms. If all other investigations proved negative, neurologic consultation, and possibly ventriculography, should be resorted to.

Despite the oft-repeated statements of otolaryngologists, to the contrary, I believe that sinusitis is a very common cause of chronic headache.

Savill ("A System of Clinical Medicine"; William Wood & Company, 1937) says that constipation is much over-rated as a cause of headache, and that anxiety should be the first thought when a patient complains of a distress, rather than a real pain, in the head.

Loewenberg ("Clinical Endocrinology." F. A. Davis Company, 1938) states, "It is well to bear in mind that one grain of dried thyroid extract raises the basal metabolic rate five percent; thus the daily dose required for an adult who has a minus-forty basal metabolic rate would be five grains of dried extract by mouth (to bring the rate to the low-normal level—Ed.) Children require about two-thirds of the adult dose. . . . The maximum effect of thyroid medication is obtained on or about the tenth day of its administration. . . . If the response to the amount of thyroid given is not sufficient, the dose may be increased guardedly, adding a half-grain daily each week, to bring the metabolic rate to the lower level of the accepted normal. The hypothyroid individual is 'geared' to low speed, and a too-high rate of speed may cause unwonted imbalance. . . . Do not give thyroid extract continuously. A sufficient maintenance dose is to be given daily for four weeks; discontinued for a week or ten days; and resumed for another period of four weeks. This method will diminish the tendency to gastro-intestinal disturbance, cardiac damage, and excessive loss of weight."

#### Discussion by P. F. Natale, M.D., Des Moines, Ia.

The long history of headache would tend to rule out brain tumor. Practically every other serious cause of headache has been eliminated by the very thorough work-up. The combination of sleepy attacks, listlessness, and a dry, rough skin makes

one think of *myxedema*. The point could easily be settled by giving thyroid extract.

#### Discussion by R. Smith, M.D., Dundas, Ontario, Can.

The history of this case is one of the most complete and thorough that we have had for some time, but I think we should have had a report of the blood pressure and also a roentgenogram of the brain.

Headaches can be due to one of three causes: (1) Toxic states; (2) functional conditions; and (3) organic disease.

One of the most common toxic states responsible for headaches is uremia, which might cause pain anywhere in the brain, but more particularly in the region of the cerebrum or the occipital region; and a headache similar to that described in this case, with drowsiness, is one of its most characteristic symptoms. But the urinalysis and the blood chemistry studies rule this out as a cause, with a fair degree of certainty.

Foremost, as a functional cause, would be high blood pressure; but in these cases the pain comes on practically always towards afternoon or night, or follows exertion, a heavy meal, alcohol, or too much smoking, especially of cigarettes.

Organic disease seems to me to be the most likely cause of this man's headaches—possibly a tumor of the pituitary gland, which causes dry skin of the extremities; drowsiness; and paroxysmal pains, coming on often at night and waking the patient.

One must make careful inquiry for a history of what seemed to be a trivial injury to the skull, which we know could cause concussion and perhaps hemorrhage of the brain. In these cases, if the patient does not rest a sufficient time after the injury, chronic headaches might follow, due to some interference with the circulation of the cerebrospinal fluid.

This patient might also be suffering from neuritis at the base of the brain, the cause of which is just as hard to ascertain as is the cause of neuritis in any other part of the body.

Aneurysm at the base of the brain is another organic disease that might cause these headaches.

For treatment, I would suggest rest in bed for some weeks, with congenial and sanitary surroundings, small doses of Potassium Iodide, regular doses of Vitamin B<sub>1</sub>, and the withdrawal of from 40 to 60 cc. of spinal fluid.

#### Discussion by Charles P. Ryland, M.D., Washington, D. C.

The patient's chief complaint was headache in the right occipital region, which had persisted almost continuously for seven months, often the patient would awake with it in the morning. This symptom is suggestive of organic cerebral disease.

One of the first things to be done here is to determine whether the pain is from inside of the skull, or whether it is neuralgia felt in the course of a nerve trunk. The pain is probably from inside the skull, since no mention was made of the presence of "tender spots" on the scalp and since the otolaryngologist has stated that the sinuses and eyes were without disease. I presume that his negative report included the tonsils. These negative findings exclude a focus of infection in the head causing neuralgia.

Presuming that the headache is from pain in-

side of the skull, one must make a differential diagnosis of the main groups causing headaches, namely: (1) Organic disease; (2) toxic states; and (3) functional conditions.

Among the first group, under diseases of the brain, it seems that concussion, gumma, cyst, encephalitis lethargica, hydrocephaly, disseminated sclerosis, and general paralysis of the insane may be ruled out. This leaves tumor, abscess, and abnormal conditions of the pituitary gland to be considered.

The headache is over the cerebellum, and since the eyes were reported as normal, I take it there was an absence of optic neuritis, which rules out cerebellar abscess or tumor. A roentgenogram of the skull would reveal the presence or absence of enlargement of the sella turcica and the pituitary gland.

There seems to be no evidence of diseases of the intracranial vessels, such as hemorrhage, embolism, thrombosis, aneurysm, syphilitic endarteritis, or arteriosclerosis.

The negative spinal fluid would rule out diseases of the meninges, such as meningitis, pachymeningitis, syphilis (meningeal type), tumor, or cyst.

The roentgenogram of the skull would reveal the presence of any diseases of the skull itself, such as tumors, tertiary syphilis, suppuration, or new growths in the frontal, antral, or mastoid sinuses, suppuration, or tumor of the orbit. Dental disease is already ruled out, since radiographic examination was negative.

Diseases of the special sense organs are ruled out by the negative report from the otolaryngologist.

As regards the toxic causes, there are two groups, exogenous and endogenous. The diseases causing the former, such as foul air, poisonous gases, drugs, alcohol, tobacco, lead poisoning, and malaria may be ruled out. Those of endogenous origin, such as uremia, cholemia, gout, diabetes, gastro-intestinal disturbance, and toxemia from specific fevers, such as typhoid, pulmonary tuberculosis, suppuration, etc., may be ruled out. The only blood chemistry report given was blood urea, 28 mg. I take it that this is a urea nitrogen reading. This is distinctly high, but not in the uremic range.

The functional causes of headache should now be considered. The blood pressure is apparently normal, since it was not mentioned. The other causes, such as venous congestion, excessive mental strain, pressure on the head, persistent noises, sea-sickness, menstruation, hysteria, migraine, recurrent sick-headaches, epilepsy, eyestrain, and sun stroke may be ruled out.

The commoner causes of headache having been considered, I do not believe that any of these is the etiologic factor in this case, unless something is revealed by x-ray studies of the skull.

My tentative diagnosis, in the order given, are: (1) Hypothyroidism; (2) pituitary tumor; (3) bony tumor of the skull.

The first is based on the listlessness and a dry and rough skin. I do not believe that he has myxedema, since a thorough physical examination would have revealed the typical facies of this condition, and since he has no anemia. I have observed several patients who have had severe headaches, who were hypothyroid, and whose headaches were relieved by thyroid medication. The second and third diagnoses are given for want of

evidence of any other cause for the headache, if it is not due to hypothyroidism.

I should like to have a basal metabolic reading on this patient, and an x-ray picture of his skull. Likewise I should like to investigate his kidneys by the other three kidney function tests (the Mosenthal test is reported as negative): (1) Blood-urea-nitrogen and total non-protein nitrogen; (2) urea ratio; and (3) the urea clearance test of van Slyke. The latter is much more sensitive than the P. S. P. (phenolsulphonethalein) test, and shows diminished function when the P.S.P. is normal (surgeons seem to be the only ones using the P.S.P. test now). Any reading of the urea ratio (Urea N./N-P-N) over 40 percent indicates diminished function of the kidneys. I do not believe that this patient's kidneys have anything to do with his symptoms, unless one or more of these tests show definite abnormalities.

#### Solution by Dr. Whitaker\*

With the upper respiratory tract normal; properly fitted glasses failing to relieve the headache; a neurologic examination which revealed nothing; a dull expression; a dry skin; and a history of sleepy spells for 15 years, it was felt that hypothyroidism was the most probable cause of the headaches. The basal metabolic rate was found to be minus 37 percent.

Gradually increasing doses of thyroid extract relieved the headache and the listlessness. The patient eventually settled down to a maintenance dose of 5 grains daily, although 8 and 9 grains were necessary at first to elevate the basal metabolic rate to normal.

Mild hypothyroidism is a very common condition and its symptoms are often bizarre.



#### Problem No. 6 (Medical)

Presented by the Pittsburgh Diagnostic Clinic, through International Clinics

A MARRIED white man, 37 years old, was seen in October, complaining of swelling of the right side of his neck, with choking sensations; coughing spells, with occasional spitting of blood; night sweats; and pains in the right chest.

The only significant fact in his past history was that he had severe attacks of tonsillitis, sometimes developing into quinsy, between the ages of 20 and 27; none since then.

**Present Illness:** The preceding March he suddenly developed severe pain in the right chest, followed by fever; cough with spitting of mucoid material, sometimes streaked with bright blood; shortness of breath; and sweating of the upper part of the body and head. In ten days these symptoms ceased, but he did not feel well, and after a week he had another similar attack. These have been repeated, at irregular intervals, ever since, so that he has been in bed most of the time.

About a month or six weeks before he was seen, he noticed a swelling in the right side of his neck. This was not tender and did not interfere with turning his head, but bulged when he coughed, and has been slowly growing larger. A week or two later he noticed some tenderness over the liver. He lost no weight and did not feel particularly weak.

\*Adapted from *South. Med. & Surg.*, Jan., 1939.

(Continued on page 264)

# Clinical Notes and Abstracts



## A Chemical Test for Pregnancy

A TEST for pregnancy, which apparently detects substances accompanying prolan in the urine during gestation, by a chemical method, has been used in 380 women, under strict clinical control, with correct results in 358 (94+ percent).

The test requires meticulous accuracy in its performance and considerable experience in its interpretation, so it is not yet ready for use by general practitioners.

It is essential that the specific gravity of the urine be between 1.012 and 1.020. If it is above this maximum, it can be diluted with distilled water; if below the minimum, the patient must collect the specimen on arising in the morning, and even restrict her fluid intake before retiring, if necessary.

The test is positive on the 3d to the 8th day after the first missed menstrual period (that is, assuming that ovulation and fertilization took place about 14 days before the expected period, about 20 days after conception).

### Technic

The technic as we employ it now is as follows:

The specific gravity of the urine is ascertained and the sample is brought to a density of 1016 (at 21° C.). The urine is filtered to remove all sediment and is then examined for its albumin content. When the percentage of albumin present is high, the reaction cannot be considered reliable.

The filtered urine is then placed in three test tubes and treated as follows:

1.—One tube, containing one cc. of the urine (specific gravity 1016), to which three drops of a 25-percent solution of hydrochloric acid have been added, is heated for 25 minutes in a water bath.

2.—A second tube, containing one cc. of undiluted urine, is heated in the same manner.

3.—A third tube, with one cc. of urine (specific gravity 1016), to which five drops of 25-percent hydrochloric acid have been added, is boiled for two minutes over an alcohol flame.

After boiling, the tubes are put aside at room temperature, and the reactions are read in good daylight several hours later, preferably at the expiration of ten hours.

Three types of precipitates may result from the boiling of the urine with the acid.

A.—A sediment consisting mainly of proteins. This consists of particles which are light in color and in weight, and remain suspended for a long time after they have been shaken up. This sediment can be re-dissolved, either wholly or in part, by the addition of a 50-percent urea solution.

B.—An amorphous, dust-like sediment, which consists chiefly of urates. Upon shaking, the sediment whirls around in the test tube like a brown cloud.

C.—A sediment of comparatively large, heavy, black particles, sometimes needle-shaped in appearance, which rapidly sink to the bottom. This precipitate is not dissolved by the addition of 50-percent urea, but disintegrates of its own accord after a time. *This is the sediment which is indicative of pregnancy.*

The characteristic precipitate in test tube No. 1 means a positive reaction. Where it has appeared, there is no need for observing the other specimens. The undiluted urine in test tube No. 2 frequently becomes so dark and clouded by sediment (especially if the urine is of a high specific gravity) that a positive evaluation is often impossible. In some instances the precipitate in tube No. 1 is doubtful, but in tube No. 3 there is a characteristic sediment, and in such instances, too, the reaction is unquestionably positive. In general, it may be said that, as far as the really characteristic precipitate is concerned, the appearance of even the smallest particle means a positive reaction. We have never found this precipitate in samples taken from non-pregnant women, even when the urine was of an unusually high concentration.

Occasionally the sediment can be segregated and seen more easily after the addition of a 50-percent solution of urea. It also happens at times that the characteristic precipitate forms even while the test tubes are still being heated, and can be observed immediately after cooling. In such instances a preliminary diagnosis can be made within an hour or sooner after receipt of the urine specimen. Nevertheless, we have always reserved the final diagnosis until ten hours have elapsed from the time of the test.

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### Treatment of Morphinism

THE TREATMENT of morphinism that gives the best effect with the least danger is rapid withdrawal (from 4 to 10 days), the morphine being supplemented by the use of codeine, in doses of as much as 4 grains daily toward the end. One thousand (1000) cc. of 5-percent dextrose solution, given intravenously three times a day, prevents dehydration, reduces the weight loss, and eases the sense of restlessness for two hours after each injection. From 15 to 30 grains (1 to 2 Gm.) of bromide, four times daily for the first three days, also reduces restlessness, but bromides must be carefully watched and never continued beyond the fourth day. A hypnotic before bedtime is desirable, and paraldehyde, from 10 to 20 cc. in oil, by rectum, is one of the most effective and least harmful. Diarrhea is controlled by bismuth subcarbonate in

\*J. of Contraception, Mar., 1939.



5-grain doses. The patient is allowed to get out of bed and walk around whenever he wishes. Recovery from symptoms is very rapid under this routine; only slight physical signs remain 4 days after the last dose of morphine has been given, and the patient gains weight. Psychotherapy must then be begun, to restore the proper mental outlook of these patients.—L. KOLA, M.D., in *Med. Ann. Dist. Col.*, April, 1939.

[The addict takes morphine because it gives him more confidence and enjoyment in life. Benzedrine (amphetamine) has similar psychologic effects and is not a habit-forming drug. Why not employ it as a substitute during treatment and afterward?—Ed.]

### Newborn's Age\*

THE CRITERIA used to determine the age of a fetus or infant are based on Scannon's figures for weight and length, in relation to the menstrual age of the fetus. The fetus is placed in the group in which at least two of the three criteria apply:

- 1.—*Abortion.*
  - A.—Less than 400 Gm. in weight
  - B.—Less Than 28 cm. in length
  - C.—Less than 22 weeks of pregnancy (missed abortions are excluded)
- 2.—*Premature.*
  - A.—Previa—
    - a.—From 400 to 999 Gm. in weight
    - b.—From 28 to 35 cm. in length
    - c.—From the 22d to 28th week.
  - B.—Viable—
    - a.—From 1,000 to 2,499 Gm. in weight
    - b.—From 35 to 47 cm. in length
    - c.—From the 29th to the 37th week.
- 3.—*Term.*
  - A.—From 2,500 to 4,499 Gm. in weight
  - B.—From 47 to 54 cm. in length
  - C.—From the 38th to 42d week.
- 6.—*Postmature.*
  - A.—More than 4,500 Gm. in weight
  - B.—More than 54 cm. in length
  - C.—More than 42 weeks.

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### Low Back Pain

IN examining and treating a large number of cases of dorsolumbar irritation, it was observed that the distribution of the 12th dorsal and 1st lumbar nerves covers a much wider area than is shown in the present accepted texts, its distribution being such that it overlaps the region of the sacroiliac and lumbosacral regions. Irritation of these nerves may simulate sacroiliac and lumbosacral pain or other low back disturbances.

The dorsolumbar spine, because of certain mechanical, anatomic, and clinical factors, is susceptible to frequent irritation, and in a large series of cases, it appears that pain originating in the dorsolumbar

region constitutes one of the most common types of backache.

Dorsolumbar pain develops a definite syndrome, with a characteristic area of tenderness, the patient usually being unaware of its extent and location until it is elicited; this latter fact is of value in detecting malingering. X-Ray studies of these cases are frequently negative or misleading.

The most efficient therapy in the cases of common etiology (trauma, infection, postural defects, spinal arthritis) is perineural injection of procaine, alcohol, or a combination of metabolic amines derived from the carnivorous pitcher plant (*Sarapin*), for nerve blocking. It affords rapid relief of pain, early rehabilitation, proof of diagnosis in several minutes, and eliminates or accentuates other conditions which it may possibly overlap.—BERNARD D. JUDOVICH, M.D., and WILLIAM BATES, M.D., F.A.C.S., in *Indust. Med.*, April, 1939.

### Retroperitoneal Abscess

WHEN the symptoms of general sepsis are present (fever, leukocytosis, chills, sweats, anemia), it is difficult, at times to diagnose the location of the infection.

An abscess behind the posterior peritoneum (retroperitoneal abscess) is often not palpable, especially in the obese patient, and must be diagnosed by these symptoms and signs: (1) Pain in the groin, which may radiate to the back and down the thigh; (2) partial flexion of the thigh on the abdomen (when the psoas muscle is involved); (3) fever and other signs of sepsis; (4) a history of preceding appendicitis, colonic carcinoma, diverticulitis, suppurative arthritis of the hip or spine, fracture of the pelvis, urologic instrumentation (especially transurethral resection of the prostate), postpartum or postabortal endometritis, pelvic carcinoma, curettage, cauterization, insufflation of air into the fallopian tubes, or laceration of the cervix or perineum. The hip joint on the affected side cannot be moved, actively or passively, through its full range of motion. Occasionally, a tender, doughy mass may be palpable abdominally or rectally.

Ingegno and Spitz<sup>1</sup> report three undiagnosed cases of retroperitoneal abscesses, which followed infections of the deep nodes from prostatitis and cervical infection following irradiation of a carcinoma. The proper diagnosis was made after some weeks of delay. Incision and drainage of large amounts of pus through an inguinal incision was carried out in two cases. Death followed, four days and four weeks afterwards, respectively. One patient could not be operated upon because of her poor general condition.

A personal case was treated with short-wave diathermy for a period of eight days. Fever, which had been present for a month (ranging from 100° to 104° F.), disappeared in twenty-four hours. The inguinal pain gradually lessened and the patient's condition was much improved. Because of the persistence of thigh flexion, however, the patient demanded surgery.

Exploration revealed a retrocecal, perforated ap-

1.—Ingegno, A., and Spitz, S.: Syndrome of Retroperitoneal Abscess. *N. Y. S. J. M.*, 39:794-800 (April 15), 1939.

\**J. A. M. A.*, April 22, 1939.

pendix and an abscess cavity containing the green-producing streptococci. Death followed in five days, from peritonitis. In view of the remarkable disappearance of symptoms following the short-wave therapy, and the high mortality rate following surgery, it might be well, in the future, to treat these cases with physical therapy and vaccines.

R. L. G.

### A Western Mobile X-Ray Laboratory

IN the February issue of "C.M.&S.," 1939, on page 104, I was interested to see the cut of the portable x-ray laboratory, as used by the 1939 World's Fair in New York, and described as "The first automobile x-ray unit in existence"—an erroneous statement, which I wish to correct.



Fig. 1.

My laboratory is not only called a mobile x-ray laboratory, but I believe it is as complete as the one pictured (see Fig. 1). As standard equipment, every time I answer a call I am equipped with a portable Bucky diaphragm; a stereo cassette changer for 14 x 17 inch films; a fluoroscopic screen; refrigerated processing tanks; a light-marking device; and a portable dark room (air-conditioned), all of which supplements my 30-M.A., shockproof, portable x-ray apparatus.

This laboratory was established in Long Beach on March 1, 1938, and found a ready field in this area. Much the same service has been available in Los Angeles for a number of years, for handy x-ray studies in patients' homes.

I should be interested to know if there is anything similar to this available anywhere in the East.

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### Contagious Diseases of Childhood\*

**DIPHTHERIA:** Regardless of what antigen is used to produce immunity against diphtheria, it must be emphasized that multiple doses have been shown to produce a more sustained high level of immunity. The best results with toxoid have followed the use of three doses (0.5 cc., followed, at three-week intervals, by doses of 1 cc.). "It is the infant who needs immunization most, and is bothered by it the least." Experience has shown that diphtheria is much more quickly wiped out by immunizing babies than by immunizing school children.

\*Minn. Med., Feb., 1939.

**Scarlet Fever:** Immunization by the Dick scarlet fever toxin is valuable, despite objections to its use. Records show that it gives almost 100 percent protection.

Septic cases of scarlet fever, with exudative manifestations in the nose and throat, are most effectively treated by the intravenous administration of large doses of human convalescent serum. Toxic cases that can be treated early in their course are greatly benefited by large doses (12,000 to 18,000 units) of scarlet fever antitoxin. Sulfanilamide or Neoprontosil, in doses of .03 Gm. per pound every twenty-four hours, effectively aids natural or artificial antitoxin.

**Measles:** Though most of us are prone to entertain the thought that measles is "just measles," inspection of the high mortality rate should convince us that we are wrong, and that, not only should convalescent serum of blood be used as a preventive in debilitated children, but as an attenuating agent in every small child exposed to measles. In pre-eruptive measles, large doses of convalescent serum or immune blood, have been shown to modify the disease in a striking manner.

**Erysipelas:** Roentgen irradiation is effective, but expensive and often unavailable. Short-wave ultraviolet therapy causes a somewhat similar reaction in the skin. It usually requires only one treatment, but may be repeated. It must be given at a distance of 8 inches, with an exposure of from 8 to 15 minutes, one inch of the normal contiguous skin being included in the treatment area. Sulfanilamide is a valuable adjuvant, as is the use of blood transfusions.

**Epidemic meningitis:** Massive doses of high antitoxic serum, given intravenously, reduce the fatality rate quite markedly. Sulfanilamide alone has affected a high percentage of cures. Oral therapy with the drug is adequate, due to its rapid absorption.

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### The Open Treatment of Accidental Wounds\*

NEVER treat a contaminated wound with antiseptics. *No antiseptic has been devised which is not on the whole more injurious to the tissues than to bacteria.* Antiseptics quickly lose their bactericidal power when placed in contact with body fluids. If an antiseptic does not destroy practically every bacterium in the wounds, it simply creates a pabulum of dead tissue, on which bacterial growth can flourish. Iodine injures the tissues, with the formation of a scab under which bacterial growth can flourish. *If cut fingers be placed under running water, the wound held open and thoroughly washed out, hemorrhage encouraged, the finger cleansed with soap and covered with a sterile, dry dressing, the wound will nearly always heal without even becoming sore.*

In the treatment of large accidental wounds, the skin around the wound is shaved and thoroughly scrubbed with soap and water. Grease is removed with ether or mechanics' soap. The wound is inspected and all visible foreign material picked out of it or removed by irrigation with physiologic

\*South. Surg., Dec., 1938.

saline solution. The wound is then surrounded with sterile towels, and with aseptic technic, the process of removing all foreign material is continued.

Dead tissue is cut away and bleeding vessels accurately tied with fine catgut. The operator changes his gloves and explores every recess of the wound. The wound may then be loosely closed with skin sutures or left wide open, without suturing of any kind, until all danger of infection has passed. Wounds of the face may, however, be sutured at once, on account of the excellent blood supply. The tight closure of accidental wounds of the scalp is fraught with the danger of widespread subcutaneous sepsis and intracranial abscess.

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### Sexual Frigidity\*

ONE group in the medical profession remarks, with a shrug, that medical aid is impossible in cases of frigidity; whereas another group enthusiastically orders treatment with endocrine products. Both are completely wrong. *Frigidity is a neurosis*, that is to say a disease of the unconscious, and can be cured by psychotherapy, if at all. *What these women suffer from is not a lack of inner secretion, but unconscious conflicts.*

It is by no means correct to lay the blame for frigidity solely on a potency disturbance of the man. The general opinion, that the woman needs only to find the "right" man in order to respond fully, is still more incorrect. Furthermore, the common idea that the man must have a certain technic to produce orgasm in a woman, is wrong. The healthy woman permits coitus only if she loves tenderly at the same time. If this condition is lacking, she will consistently refuse coitus. It is true that the graph of excitement in coitus shows a more rapid rise and fall in the man than in the woman, so that pre-coital caresses are, in many cases, necessary, but this by no means implies that special subtleties are required. Real tenderness and some experience are the best assistants.

The naive belief that the most precise details about her sexual life can be obtained from the patient herself is wrong. The women themselves do not know what is wrong with them, or else are ashamed to speak about it, or consider frigidity to be natural and visit the physician for complaints of various types (genital itching, pain on penetration and during intercourse, leukorrheal discharge, dysmenorrhea, abdominal pains of all sorts, backaches, difficult urination and defecation, menstrual disturbances, enlargement of the uterus and development of myomas). Any of these symptoms and signs may arise following the absence of orgasm over a period of months or years.

The advice, often given by physicians, to have children as an expedient against frigidity, is wrong. Experience shows that only those children are loved who are wanted, so that such advice is an injustice to the child, who is often disliked by the mother.

A frigid woman is one who does not have a vaginal orgasm. It is false to believe that only those women can be described as frigid, who regard every sexual contact with the male as repulsive.

\*Urol. & Cut. Rev., March, 1939.

The normal sexual act of a woman must include three stages: (1) The genital area becomes moist and there is an erection and pulsation of the clitoris. The pleasure in physical contact, embraces, and kisses, is followed by the wish for entrance of the penis; (2) the desire for friction commences. The woman is aware of its gradual increase, and desires its continuation; (3) at the same time, or perhaps oftener, directly following the man's orgasm, the woman's orgasm takes place, accompanied by involuntary muscular contractions of the genital and pelvic region, followed by the feeling of release from sexual tension. In contrast to the man, whose ardor subsides more quickly, the woman still wishes, even after orgasm, to remain united and keep the penis within her. *The physician must determine exactly what part of this normal course of the act is lacking in his patient.*

Questions for the physician to ask: Does secretion appear on the genitals? Is there a lack of involuntary muscular contraction at the end of coitus? Is the patient sleepless after intercourse?

The lack of secretion is a sure sign of serious frigidity. The lack of involuntary muscular contraction at the end of orgasm is a sure sign of absent orgasm. Sleeplessness after an unsatisfactory coitus is a sure sign of a sexual disturbance.

*Vaginismus cannot be cured by surgical methods.* The prognosis of frigidity is favorable if the patient is treated by psychotherapy.

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### Sulfapyridine in Lobar Pneumonia

SULFAPYRIDINE was given to 30 unselected pneumonia patients. Of these, 29 recovered. One tablet (0.5 Gm.) was given every four hours for three to four days, followed by 1 tablet twice daily for two or three days, giving an average total of 12 grams. Later in the series, these doses were doubled. Fever and cyanosis disappeared within forty-eight hours in a number of cases; a drop in temperature of four degrees usually occurred within two days after beginning treatment; and many of the patients felt so much improved that they wished to go home. Fever followed the administration of this drug to one patient, as has occurred when sulfanilamide has been given. This fever disappears as soon as the drug is stopped.—W. L. WHITTEMORE, M.D., *et al.*, in *N. Y. S. J. M.*, Mar. 15, 1939.

(As sulfapyridine is now being released on the American market, it is well for the physician to know of its dosage and indications.—Ed.)



### Epinephrin in Abdominal Pain

MANY acute attacks of pain within the abdomen are due to spasm or colic, and not to inflammation, per se. Spasm in inflamed hollow viscera is more painful than spasm without inflammation. Patients with suppurative appendicitis have walked into my office complaining only of slight discomfort.

The remarkable relief afforded patients with bronchial asthma by injections of epinephrin encouraged me to try such injections on patients with other evidences of vagal overstimulation (pylorospasm, renal colic, enterospasm). Many cases

of pylorospasm, diagnosed by a history of upper abdominal pain and vomiting and by tenderness at the tip of the ensiform cartilage, have been relieved in a few minutes by the injection of 4 or 5 minims of epinephrin. Several injections often bring about a permanent cure.—JAMES THURSTON WOLFE, M.D., in *South. M. & S.*, April, 1939.



## The Treatment of Urinary Infections\*

My experience has taught me that one should not start treating a patient for a urinary infection until one is certain that an infection is present in the urinary tract. The presence of pus in urine that is obtained in the usual uncontrolled way must be checked by catheterization, if the patient is a girl; and if the patient is a boy, a specimen of urine must be obtained after the prepuce and meatus have been cleaned.

With the use of the ketogenic diet, mandelic acid, and sulfanilamide, it has been possible to clear up urinary infections, even in the presence of urinary stasis. It is essential that an excretory urogram be made in all cases of urinary infection, so that urinary stasis may be detected before the kidneys have been seriously injured.

Sulfanilamide may be given in the acute stages of infection. The bactericidal effect is not entirely dependent upon the reaction of the urine, though it acts better in an alkaline medium; and it is excreted in bactericidal quantities by kidneys that are so severely injured that the concentration of urea is 100 mg. per 100 cc. of blood. It is given in two-thirds the usual dose for streptococcal infections; that is, 10 grains (0.65 Gm.) for each 20 pounds (9 Kg.) of body weight daily, in from four to six doses. Sodium bicarbonate is given in doses of from 30 to 60 grains daily. Water is given in usual amounts, but may be restricted if the bactericidal effect is not secured. It is effective against all bacteria except *Streptococcus fecalis*.

Mandelic acid is effective against the organism just mentioned, and also sterilizes the urine rapidly when it is acid. I administer 1 Gm. for each 100 cc. of urinary output in twenty-four hours. Both drugs should be continued for five or six days, to kill bacteria in the deeper layers of the mucous membranes.

A thorough urologic check-up must be made to determine the presence of urinary obstruction and to correct it.

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## The Meaning of pH

When Arrhenius announced the theory of ionization, whereby he explained why salts carry twice as much electricity as, for example, sugar, because the salt becomes dissociated in solution into two parts, positive and negative, each carrying a charge of electricity, it became evident that water dissociated, like salts, into hydrogen and hydroxyl. The hydrogen thus dissociated in a molecule of water was termed the Hydrogen Ion. Then it was also discovered that acidity was the behavior of this ion.

For many years the amount was designated as the "concentration" of hydrogen ion. This, when measured, was found to be very small, actually 1/10,000,000 of a normal solution—a normal solution being such a solution as contained as much of the hydrogen as represented by the molecular weight (a normal solution of salt, for example, being Na-23; Cl-35.4, or 58.4 grams in a thousand grams of water).

However, the figure 1/10,000,000 n is an unhandy expression and so it was written for brevity as  $1/(10)^7$  n. This figure, "7", is the logarithm of one ten millionth and, since hydrogen usually occurs in amounts in the general neighborhood of 1/10,000,000 normal, Sørensen, the Danish chemist, proposed to designate acidity by simply the logarithm. This logarithm he called "p."

Since we are talking of hydrogen, we must speak of "pH." If we speak of the other ion in water, namely, the one determining the basic value of water, OH, then we measure it as pOH. Since water is about the only fluid that approaches absolute neutrality (H-OH), this neutral point is pH-7. A decinormal acid solution is 1/10 normal, or  $1/10^1$  normal, or pH-1. On the other hand, a decinormal alkaline solution is as far on the alkaline side of neutrality as decinormal acid is on the other side, or  $1/(10)^{14}$ , or pH-14.

The rule, then, becomes: All solutions whose pH is from 1 to 7 are acid; all whose pH is from 7 to 14 are alkaline.—*Kalak Review*, Feb., 1939.



## The "Medical Appendix"\*

I use the term "medical appendix" (a poor grammatical expression) to designate those cases which present themselves as problems in medical diagnosis, rather than in surgical diagnosis.

**Children:** Sharp, colicky abdominal pain, which is referred to the umbilicus, may be the only symptom of chronic appendicitis in children. This pain may recur at any time of the day or night, but commonly occurs at meals and usually lasts but a few minutes. Umbilical pain may appear which is more severe, lasts longer, and is sooner or later followed by vomiting, which only partially relieves it. If the latter type of attack is brief, the diagnosis often made is that of "acidosis."

**Adults:** A sudden and severe attack of appendicular colic may exactly resemble gallstone colic. The peptic ulcer type of pain may be produced by appendicitis, as a diseased appendix can set up the same hypersecretion and pylorospasm. The x-ray report may be deceptive, as in both types of cases the duodenal cap is imperfectly filled and there is vigorous hyperperistalsis and rapid emptying of the stomach. Careful history-taking often reveals the fact that the earliest abdominal symptoms were suggestive of appendicular or colon pain, and only later did the pseudo-ulcer symptoms appear. Spastic colitis may be associated with or caused by appendicitis.

**X-Ray confirmation:** After an opaque meal, these points are valuable in confirming the diagnosis: (1) Tenderness of any part of the appendix, under

\*J. A. M. A., Nov. 5, 1938.

\*Brit. M. J., Jan. 1, 1939.

fluoroscopic control; (2) shifting of the tender point with displacement of the cecum; (3) fixed, rigid appendix; and (4) delayed emptying or imperfect filling.

REGINALD MILLER, M.D., F.R.C.P.  
London, Eng.

### Treatment of Procidientia Recti by Injection

ADVANCED cases of procidientia recti may be cured by injecting quinine and urea hydrochloride solution into the prolapsed rectal mass.

A 10 cc. syringe and a half-inch, 27-gage needle are used. Starting at the outermost part of the mass (the lumen of the bowel), four punctures are made into the muscular coat and from 3 to 5 drops of solution are deposited at each point. The process is repeated in a large circle, one-half inch higher on the mass, and these punctures are staggered with the first. Similar injections are carried out one-half inch from each other until the rectal sphincter is encountered and the whole mass has been systematically injected.

The patient then changes from the left lateral (Sims) position to the knee-chest position, the mass is replaced, and the rectal ampulla is packed full with several yards of six-inch gauze, which has been soaked in a mixture of equal parts of hot alcohol and water.

The patient is put to bed, given sedatives, and forbidden food for 24 hours. The pack is removed and the patient allowed milk for another 24 hours before getting up.

Where time permits, solid food should be forbidden during the preceding 48 hours, and cleansing enemas given just before the injection.—J. M. GAUME, M.D., in *Med. Rec.*, April 19, 1939.

Look for **FACTS AND COMMENTS** among the advertising pages at the back.

### Delirium Tremens

DELIRIUM TREMENS is a complication of high-tolerance alcoholism, and the periodic drinker, unless he persists in maintaining a high saturation of the body fluids over a period of many days or weeks, is not likely to have this complication. The Saturday-night drinker, even though he receives some trauma to the body or head, is not likely to become delirious.

Under the best of treatment, alcoholic delirium is a condition which is likely to continue for from three to five days, and the surest way to raise the mortality rate is to endeavor to produce a sleep from which the patient will awake with a clear mentality. Morphine, chloral, and bromides in large doses, and even barbiturates, are able to do much harm. Physical therapy, with treatment of the acidosis present and with the understanding that the patient will not do well under physical restraint and will continue to be delirious for several days, should markedly lower the mortality.—J. C. DOANE, M.D., in *J. A. M. A.*, April 29, 1939.

[Success has been reported in these by using large doses of vitamin B<sub>1</sub> intravenously, together with dextrose solution.—Ed.]

### The Treatment of Pruritus\*

THE patient's clothing in cases of pruritus, should be moderately light. Overheated rooms and heavy bedclothes aggravate the itching. Late meals should be forbidden. Condiments, coffee, and alcoholic and malt liquors should be excluded, and very little salt should be allowed. Baths should be taken lukewarm, as heat accentuates the pruritus. Colloidal substances, such as starch, oatmeal, or bran should be added to the bath, in conjunction with sodium bicarbonate. After the bath, this solution should be applied:

R	Mentholis	0.60
	Phenolis	0.60
	Ethyl alcohol q.s. ad	120.0

Sig.: Apply at bedtime or oftener.

A soothing and antipruritic powder, for use in general pruritus, may be prescribed thus:

R	Acidi Borici	1.0
	Mentholis	0.48
	Zinc Stearate	15.0
	Amyli puri	
	Talci puri q.s. ad	120.0

Sig.: Use as a dusting powder several times daily, as needed.

N. E. ARONSTAM, M.D.

Detroit, Michigan.

### The Seminar

(Continued from page 258)

**Physical Examination:** A short, stocky, powerful man, who did not appear nervous, cachectic, weak, cyanotic, nor jaundiced. His temperature was 99 degrees F.

In the right side of the neck there was a chain of enlarged glands (one the size of a walnut), running from the clavicle, under the sternocleidomastoid muscle, to the tip of the mastoid. These glands were discrete, freely movable, not tender nor inflamed, soft but not fluctuating. There was no dullness under the right clavicle. The other lymphatics were within normal limits. His throat was clear.

His chest showed moderate dullness, diminished breath sounds (especially over the lower lobe, behind), and occasional faint, dry, sibilant râles on expiration, over the entire right lung. Over the aortic area no heart sounds were heard, though there was no dullness in this region. His pulse was 100 and regular; vessel walls, normal; blood pressure, 130/85.

His liver dullness extended from the fourth interspace down to 5 cm. below the costal margin, extending across the midline and merging under the left costal margin. The edge was normal in contour, fairly firm but not nodular, and slightly tender.

Aside from these findings, the physical examination was negative.

**Requirements:** (1) State your tentative diagnosis; (2) exactly what laboratory examinations would you have made or requested? (3) suggest treatment.

\**Med. World*, April, 1939.



# Diagnostic Pointers



## Postnasal Discharge

● A postnasal discharge is a telltale and important finding which is too frequently overlooked or disregarded. There are a large number of patients who wander from one physician to another, complaining of periodic sore throats. The patient is examined and the posterior pharyngeal wall is found to be slightly injected and roughened. The tonsils may or may not be present. Ordinarily the patient clears his throat before consulting the physician, and thus the usual postnasal drip is absent. If the tonsils are present, immediate tonsillectomy is advised. Some antiseptic or astringent is used as a local application to the throat and the patient drifts on.

Prior to the tonsillectomy, it is very important to inform the patient that the postnasal discharge may require further treatment later on. If this is not done, the sore throat may persist and the physician may be discredited.—H. L. HILGARTNER, M.D., in *E. E. N. & T. M.*, April, 1938.

## Acute Toxemia of Pregnancy

● Acute, late toxemia of pregnancy presents a hypertensive syndrome which is characterized by generalized spasm of the smaller arteries. The degree of systemic vascular spasm appears to parallel the height and duration of the blood pressure and the severity of the toxemia. Examination of the arterioles of the retina reveals changes which manifest the degree of angiospasm throughout the body. The finding of *persistent* retinal vascular spasm indicates the need of avoiding generalized vascular damage by using measures to terminate pregnancy, when the condition of the patient permits. On the contrary, the presence of *mild* retinal changes, or the absence of any such changes, may indicate that the pregnancy may be allowed to continue without unduly jeopardizing the safety of the mother.—R. D. MUSSEY, M.D., in *Am. J. Obst. & Gynec.*, Jan., 1939.

## Mumps and the Ovaries

● Mumps may injuriously affect the ovaries, in the same way that it causes inflammation of the testicles. In women with underdevelopment of the genital organs, a previous history of mumps is frequently elicited. Ovarian inflammation, leading to sclerosis and permanent hypoplasia, is believed to result.—*Med. World*, Dec. 9, 1939.

## Social Status in Diagnosis

● In this country, at the present time, the marriageable age for women is from 18 to 25 years, and from 21 to 26 years for men. If a woman is

married much before this minimum age, nine times out of ten one is dealing with a high-grade moron or an individual with some mental deficiency, and the same can be said for men. The single person who defers marriage to a point far beyond the upper limit common to the general population, again is usually a psychopathic case, unless the pursuit of some profession justifies it or some definite economic condition is the retarding factor.—L. G. BROWN, M.D., in *Med. World*, April, 1939.

## Angina Pectoris

● The label, angina pectoris, or cardiac pain, or substernal pain, or anterior chest pain, should be merely the signal which indicates the *beginning* of an investigation for one or several causes, ending only when completed. The aversion to multiple diagnoses should not preclude the careful study and evaluation of all contributing factors.

Examinations should not be pursued, however, in spite of the welfare of the patient, nor is it necessary that he be permitted to suffer without recourse until a prolonged set of investigations is completed. *Common reasoning tells us that a living, though incompletely studied, patient is certainly a greater monument than a dozen patients, thoroughly studied to death.*—V. A. DIGILIO, M.D., in *Rev. Gastroent.*, Feb., 1939.

## Hemoptysis

● Hemoptysis alone should never be considered diagnostic of pulmonary tuberculosis. Seventy (70) cases of hemoptysis, without physical or roentgenologic signs of tuberculosis, have been examined bronchoscopically without the tubercle bacillus being found in one instance.—E. H. HUDSON, M.D., in *Brit. M. J.*, Feb. 25, 1939.

## Varicocele

● Varicocele is an affection of adolescence and young adult life, which is rarely seen later and usually tends to spontaneous disappearance. The symptoms associated with it are mental, rather than local. *The testicle is imperilled more by the operation described in the texts than by the varicocele.*

The serious varicocele is that secondary to a renal neoplasm, which may be identified by these points: (1) The patient is usually middle-aged or older; (2) it grows rapidly; (3) it does not disappear on lying down; and (4) it may occur on either side (idiopathic varicocele is practically limited to the left side). Although a varicocele usually indicates that the kidney growth has reached considerable size, it does not constitute a contraindication to operation for its removal.—A. E. ROCHE, M.D., in *Brit. M. J.*, Jan. 7, 1939.

# Thumbnail Therapeutics



## Safeguarding the Ruptured Appendix

● It has been my practise for the past three years to insert a Pezzer (mushroom) catheter into the cecum in practically every case of ruptured appendix. This is done through the cecal opening, which is then drawn together by two purse-string sutures of fine linen thread, previously placed. A clamp is placed on the distal end of the catheter, and released from time to time to permit the escape of gas and fecal material. *Distention is more to be dreaded than infection*, as the peritoneal cavity will take care of itself if the source of infection has been removed.—JOSEPH L. DECOURCY, M.D., in *Ohio St. M. J.*

[The mortality rate in very acute and ruptured appendicitis has been more than halved by the use of routine decompression. A mushroom catheter can be retained in place much better than an ordinary urethral catheter (size Fr. 28), but the latter usually acts very well, if properly sutured to the cecal wall and to the skin. Physiologic saline solution and dextrose may be slowly administered through the catheter with a large syringe or funnel, unless distention results.—Ed.]

## Protection Against Sunburn

● Protection against ultraviolet rays may be obtained by the use of wool fat, yellow petrolatum, and diachylon ointment. Before giving ultraviolet treatments, all greasy ointments must be removed from the skin.

The most efficient substance for protection against ultraviolet rays is titanium dioxide, which may be made up in the form of a lotion, paste, ointment, or cream. These medicaments are more effective as a sunburn preventative than any of the commercial creams on the market.—BERNARD FANTUS, M.D., in *Arch. Phys. Ther.*, Feb., 1939.

## Gelatin in Peptic Ulcer

● A series of peptic ulcer patients were remarkably relieved by the ingestion of a high-protein diet and hourly feedings of gelatin between meals. The patients were given a bland, high-caloric and high-protein diet, consisting of 150 Gm. of protein, 100 Gm. of fat, and 200 Gm. of carbohydrates. The proteins were given in the form of lean, boiled meat, chicken, cottage cheese, milk, and unflavored gelatin, U.S.P. (Knox Gelatin). The gelatin was supplied in ordinary commercial envelopes, each containing eight grams, one of which was taken each hour, in one-quarter glass of water, for seven doses daily.—C. WINDWER, M.D., and M. J. MATZNER, M.D., in *Am. J. Dig. Dis.*, Jan., 1939.

## External Otitis

● The type of chronic inflammation of the external auditory meatus resembling impetigo responds readily to 1-percent ammoniated mercury ointment or to ultraviolet irradiation. If the lesions resemble eczema, be careful not to *over-treat*. First, apply oily calamine lotion, to control the pruritus; second, apply crude coal tar (one dram to the ounce of zinc oxide ointment), especially if the skin is involved. One-percent silver nitrate solution may be used if infection is definitely present; 1:5,000 acriflavine solution should be used alternately. Do not let the patient scratch the skin or introduce anything into the meatus.—H. MACCORMAC, M.D., in *Proc. Royal Soc. Med.*, Mar., 1938.

## Apparent Death

● If a patient collapses on the operating table, respiration should be stimulated by the administration of carbon dioxide and oxygen, preferably through an intratracheal catheter. *Coramine* should be injected in from 1 to 5 cc. doses. If death is impending, the large dose should be given intravenously or the smaller dose should be *injected directly into the heart by using a needle at least four inches in length* (the collapsed heart falls away from the chest wall), such as a spinal puncture needle. It appears that some stimulation follows the introduction of a needle, regardless of the type of drug used.—GEORGE EDWARDS, M.R.C.S., D.A., in *Brit. J. Anesth.*, April, 1938.

## Sulfanilamide in Epididymitis

● Sulfanilamide rapidly cures gonococcal epididymitis. It has been shown to have no adverse effect on spermatogenesis or the morphology of spermatozoa. Prostatitis occurs less frequently and periurethral abscess rarely, when the patient has been under sulfanilamide therapy.—F. A. REUTER, M.D., in *Am. J. Surg.*, Nov., 1938.

## Treatment of Addison's Disease

● In the treatment of Addison's disease and other severe adrenal cortex deficiencies, gratifying results are obtained by giving 10 Gm. of sodium chloride and 5 Gm. of sodium citrate daily, at the same time restricting the *total* intake of potassium (in the diet and otherwise) to *less* than 2 Gm. a day. When this is done, the amount of cortical hormone required for maintenance can be reduced to a low minimum.—RUSSELL M. WILDER, M.D., Ph.D., in "New International Clinics," Sept., 1938.



## THE DOCTOR'S STUDY

*Nowhere in this world I find  
Quiet life and peace of mind  
Save in some sequestered nook  
With a book.*

—THOMAS A. KEMPIS.

## Injuries and Fees

**STANDARD BODYPARTS ADJUSTMENT GUIDE.**  
Traumatic Injuries, Medical Fees, Evaluations. Chicago:  
*Insurance Statistical Service of North America.* 1939.  
Price, \$8.00.

IN THIS highly mechanized age, which has arrived before the human race had developed perception and wisdom to meet its dangers adequately, physical injuries are common, and many of them, especially in industry, occur in such circumstances that someone's carelessness must be paid for, the amount of such payment being decided by insurance officials, claim adjusters, lawyers, and the courts, all or most of whom are laymen who have little or no knowledge of anatomy, physiology, or pathology, and so must render their decisions largely by guess or by self-interest.

Here is a book which will correct this anomalous condition by giving all parties in such transactions sufficient technical and statistical information to permit clear thinking and wise judgments.

Physicians, especially, will find in these pages such anatomic illustrations as have never been published, so that they can review large sections of that important subject directly from these splendid cuts and the clear and brief text which accompanies them, as well as other information of great practical importance, which is not readily available elsewhere.

The many medical men who are doing industrial work will find this book invaluable, as it gives all the information necessary for the preparation of reports of accidents and injuries and for enabling them to testify in court actions with intelligence and authority. The tables of average periods of disability from various injuries and of the fees charged, all over the country, for their medical and surgical management, have never before been presented in such a direct and practical form.

The general divisions of the book, thumb-indexed in the margin for quick reference, are: Introduction to the Body; Medical Fees; Eye, Ear, Nose, Throat, and Dental Fees; Traumatic Cases; Occupational Diseases; Evaluation; Compensation; and Medical Terminology (this last especially for laymen who use the book). Under these headings, one will find all that is necessary to be known about the various subjects for the intelligent handling of the economic and legal aspects of compensable injuries and diseases.

The bookwork is excellent, the large, clear type and the excellent illustrations (prepared especially for this volume), showing up clearly on the heavy plate paper used. The binding is of heavy art-leather, tastefully stamped in silver, and is of the loose-leaf type, so that the contents can be kept up to date.

## New Books

Any book reviewed in these columns will be procured for our readers if the order, addressed to CLINICAL MEDICINE AND SURGERY, Waukegan, Ill., is accompanied by a check for the published price of the book.

## The Treatment of Fractures

Scudder

**THE TREATMENT OF FRACTURES.** By CHARLES LOCKE SCUDDER, A.B., Ph.B., M.D., F.A.C.S., Consulting Surgeon to the Massachusetts General Hospital; Formerly, Assistant Professor of Surgery, Harvard Medical School; etc. Eleventh Edition, Revised, 1,209 Pages; 1,717 Illustrations. Philadelphia and London: W. B. Saunders Company. 1938. Price, \$12.00.

SCUDDER'S standard text has been enlarged by the addition of chapters by a number of progressive surgeons, on various aspects of fracture practice.

As it stands, it is the foremost single volume on fractures. The illustrations are superb. Those on possible complications and the technic of using bone instruments in reducing a fracture, alone, are worth the money.

The advice given on anesthetics is very practical. It is to be hoped that the advice given for the use of intravenous anesthetics is remembered: "Evipal should be used for young, vigorous adults only."

Every aspect of fracture management is discussed and illustrated. The technic of suturing a fractured patella has much to recommend it, as against the older method of wiring the fragments.

## Diseases of Women

Berkeley, White, and Cook

**DISEASES OF WOMEN.** By Ten Teachers, under the Direction of CLIFFORD WHITE, M.D., B.S. (Lond.), F.R.C.P. (Lond.), F.R.C.S. (Eng.), F.C.O.G. Edited by SIR COMYNS BERKELEY, CLIFFORD WHITE, FRANK COOK. Sixth Edition. Baltimore: William Wood and Company. 1938. Price, \$6.00.

THIS sixth edition appears to be an ideal gynecology text for the practitioner or student. The practitioner may readily find related topics under chapter headings, many of which consist of common gynecologic symptoms ("dysmenorrhea," "ab-

domino-pelvic pain," "vaginal discharge," "vaginitis"). For quick reference, such an arrangement is invaluable.

The student will enjoy the natural colored pictures of the vulva, vagina, and cervix, which so clearly illustrate various diseases, such as cervicitis, caruncle, and acute gonorrhea.

Both will find it easy to read, informative, and revised up to the present. The discussion on cervical erosion is excellent, but minimizes the value of electrocoagulation. That on vaginal examination would be rendered more valuable by the inclusion of sketches.

## Chevalier Jackson

### An Autobiography

THE LIFE OF CHEVALIER JACKSON. An Autobiography. New York: The Macmillan Co., 1938. Price, \$3.50.

THIS IS THE fascinating story of a small, frail, tender-hearted boy who, because of a limited family budget, home chores, and especially an insatiable urge to be making something useful or beautiful—peg tops (sold at six cents each), wall brackets, picture frames, and suchlike—in the family woodworking shop, and to do things that others considered impossible, had no time to play, but was steadily developing his constructive imagination and a wonderfully dextrous pair of hands.

Then came the learning of the technics of oil painting and of decorating glass and china, which largely paid for his medical education—and later made it possible for him to record, personally, the things he saw through the remarkable instruments he invented and made—and later the struggles to gain a foothold in the infant specialty of laryngology.

The long, slow, heartbreaking march to international fame, by means of equipment consisting of an alert and fearless mind, the heart of a Saint Francis, a will of watch-spring steel, the inspired imagination of a true artist, and unbelievably dextrous hands, is told with a directness and simplicity that make it take hold upon the imagination of the most phlegmatic reader.

Here is a story of true heroism in the lifelong and arduous pursuit of an ideal—the founding and establishment of a new science and a new art for the preservation of human life, in the face of tremendous obstacles erected by stupidity, prejudice, jealousy, self-interest, and other unlovely motives—and of the triumphant transformation of that ideal into reality. Here is the story of Chevalier Jackson, Father of Bronchoscopy, as only he could tell it.

And the book is worthy of its subject; workmanly printed and made; simply and appropriately bound; and illustrated with 16 full-color reproductions of the author's paintings and works of craftsmanship, and 64 photographs of scenes connected with his life and work.

No forward-looking physician can afford to deny himself the excitement and inspiration which the reading of this book will bring.

## Midwifery

### White

MIDWIFERY. By Ten Teachers, under the Direction of CLIFFORD WHITE, M.D., B.S., F.R.C.P. (Lond.), F.R.C.S. (Eng.), F.C.O.G. Edited by SIR COMYNS BEKKELEY, CLIFFORD WHITE, and FRANK COOK. Sixth Edition. Baltimore: William Wood and Company, 1939. Price, \$6.00.

TEN teachers in London's great hospitals and medical schools have collaborated to produce a well-rounded teaching text on obstetrics. To avoid the stigma of individualism, each section of the book, although written by one obstetrician, has been reviewed by the group as a whole.

The book is of great value to the general practitioner because it focuses attention upon points in differential diagnosis which come up from time to time in practice. Fewer ectopic pregnancies would be misdiagnosed if these words of wisdom were known. It is to be regretted that no mention is

made of the use of the peritoneoscope in the differential diagnosis of such potentially serious lesions.

The treatment of breech presentation verges on the radical. It is suggested that a primigravida whose fetus has the legs extended should be treated by cesarean section. What price the art of obstetrics?

The illustrations and text on the diagnosis of disproportion between the fetal head and the mother's pelvis are excellent.

Chloroform is recommended as an obstetric anesthetic—an opinion at marked variance with that of authorities in this country. In view of the collapse that occasionally follows spinal anesthesia, we cannot agree that it has a place in obstetric practice.

As a whole, the text is of a high standard and may well be recommended.

## Thyroid Diseases

### Means and Richardson

THE DIAGNOSIS AND TREATMENT OF DISEASES OF THE THYROID. By JAMES H. MEANS, M.D., Jackson Professor of Clinical Medicine, Harvard University; Chief of the Medical Services, Massachusetts General Hospital; and E. P. RICHARDSON, M.D., John Homans Professor of Surgery, Harvard University; Chief of the West Surgical Service, Massachusetts General Hospital. Oxford University Press: London, New York, and Toronto, 1938. Price, \$5.00.

THIS is a complete survey of our present-day knowledge of the thyroid gland. It begins with a historical resumé of the development of our knowledge of the gland; discusses functions and diseases of the thyroid and the principles underlying diagnosis and treatment of thyroid disease; and then considers the various types of goiter (colloid, exophthalmic, adenomatous, malignant, inflammatory) and myxedema.

Illustrative case histories are given of the various types of goiter, from which much may be learned of their diagnosis and management.

Means makes no attempt to treat myxedema so that the patient will attain a certain metabolic level; rather, he attempts to attain a symptom-free condition with the lowest possible doses of thyroid extract, as he feels that an overdosage may cause definite injury.

## Symptoms in Childhood

### Still

COMMON HAPPENINGS IN CHILDHOOD. By SIR G. FREDERICK STILL, K.C.V.O., M.A., M.D. (Cantab.), Hon. LL.D. (Edin.), F.R.C.P. (London). Physician Extraordinary to H. M. The King; Emeritus Professor of Diseases of Children, King's College and Hospital, London, England; Consulting Physician to the Hospital for Sick Children, Great Ormond Street, and to the Infant's Hospital, Westminster. London: Oxford University Press, Humphrey Milford, 1938. Price, \$1.75.

ANY physician who has child patients, or who has children of his own, will be interested in studying this little book. Dr. Still has succeeded in analyzing a number of common events that cause parents, especially mothers, much worry.

The chapter headings indicate the range of the book: Of Crying, Laughter, Temper, Tiredness, Appetite, Fears and Antipathies, Sleep, and School.

Common sense predominates in the discussion, and the author has fortified his views by quotations from his own case histories. The reader is led to a wider view of the questions discussed. At times, one feels that a more comprehensive and medical approach might have been used, but perhaps the homely, conversational style is meant to be an antidote to the present, superscientific attitude of pediatricians.

This is a book which can profitably be recommended to intelligent mothers of young children, and will also help the physician in advising the less intelligent ones who appeal to him for help.

## Popular Protozoology

Hegner

**BIG FLEAS HAVE LITTLE FLEAS** or WHO'S WHO AMONG THE PROTOZOA. By ROBERT HEGNER, Professor of Protozoology in the School of Hygiene and Public Health of the Johns Hopkins University. Based on Messenger Lectures, Cornell University, 1937. Baltimore: The Williams & Wilkins Company. 1938. Price, \$3.00.

HERE is a book, that, while dealing with a scientific subject which only a limited number of persons have heretofore been privileged to enjoy, is so written as to make it an interesting and even fascinating volume for both the ordinary intelligent reader and the scientist. To a person not a specialist in the field, it will prove to be most enlightening, for the subject is so presented that even those who have had no previous acquaintance with our friends and enemies in the microscopic world can easily follow the discussion and understand the situation. The many humorous and even witty illustrations (unique in a scientific work), as well as technically instructive drawings, make the material even more impressive and understandable.

To the physician who has scant knowledge of protozoa, Professor Hegner's book should be of great value, not only for further and pleasant reading on the subject, but also as a reference work.

This volume should be given careful consideration by educators, for it holds great possibilities, not shared by any other, as a basic or supplementary textbook.

There is a glossary of technical terms, for lay readers; a modest but satisfactory bibliography; and an adequate and rather unusual index. The

bookwork is excellent. Here is an opportunity for the painless study of a subject which is not well or widely understood.

J. R. C.

## Illegal Narcotic Regulations

Williams

**DRUG ADDICTS ARE HUMAN BEINGS.** By HENRY SMITH WILLIAMS, M.D., B.Sc., LL.D., with a Statement of the Narcotics Problem by HON. JOHN M. COFFEY, of Washington (Reprinted from the Congressional Record). Washington D. C.: Shaw Publishing Company. 1938. Price, \$2.50.

"THE Story of the Billion-Dollar Drug Racket; How We Created It and How We Can Wipe It Out." This sub-title condenses the thesis of the book.

According to Dr. Williams, the only Federal law we have on the distribution of narcotics is the Harrison Drug Act of 1914, which placed the whole business in the hands of the physicians, who alone are capable of handling it, while the Narcotic Code (which is an illegal Federal narcotics regulation, illegally in force for 18 years) takes it away from the physician and thus automatically creates a "dope ring." Twenty-five thousand physicians have been fined or imprisoned for violations of an illegal code. Narcotic clinics have been forced to stop their humanitarian activities.

Despite thousands of prosecutions, no physician has ever been able to get a hearing before the Supreme Court! This book deserves the attention of every physician who may be called upon to administer morphine.

## New Books Received

The following books have been received in this office and will be reviewed in our pages as rapidly as possible.

**THE GENUINE WORKS OF HIPPOCRATES.** Translated from the Greek by FRANCIS ADAMS, LL.D., Surgeon. With an Introduction by EMERSON CROSBY KELLY, M.D. Baltimore: The Williams & Wilkins Company. 1939. Price, \$3.00.

**SEX AND INTERNAL SECRECTIONS.** A Survey of Recent Research. Editor, EDGAR ALLEN. Associate Editors, CHARLES H. DANWORTH and EDWARD A. DOISY. With Forewords by ROBERT M. YERKES. Baltimore: The Williams & Wilkins Company. 1939. Price, \$12.00.

**HANDBOOK OF THE VACCINE TREATMENT OF RHEUMATIC DISEASES.** By H. WARREN CROWE, D.M., B.Ch. (Oxon.), M.R.C.S., L.R.C.P. 3rd Edition. New York: Oxford University Press. 1939. Price, \$1.25.

**MANUAL OF TOXICOLOGY.** By FORREST RAMON DAVISON, M.B., M.Sc., Ph.D. With a Foreword by DAVID MARVIN, M.D. New York: Paul B. Hoeber, Inc. 1939. Price, \$2.50.

**CLINICAL STUDIES IN PSYCHOPATHOLOGY.** A Contribution to the Aetiology of Neurotic Illness. By HENRY V. DICKS, M.A., M.D., (CANTAB.), M.R.C.P. (Lond.). Baltimore: William Wood & Company. 1939. Price, \$4.75.

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**KER'S MANUAL OF FEVERS.** Revised by FRANK L. KER, B.A. (CANTAB.), M.D., Ch.B. (EDIN.). 4th Edition. New York: Oxford University Press. 1939. Price, \$4.50.

**INJECTION TREATMENT OF VARICOSE VEINS AND HEMORRHOIDS.** By H. O. MCPHETERS, M.D., F.A.C.S. and JAMES KERR ANDERSON, M.D., F.A.C.S. 2nd Revised Edition. Philadelphia: F. A. Davis Company. 1939. Price, \$4.50.

**APPLIED ANATOMY.** Functional and Topographical. By ROBERT H. MILLER, M.D. Philadelphia: Lea & Febiger. 1938. Price, \$6.50.

**THE PATIENT AS A PERSON.** A Study of the Social Aspects of Illness. By G. CANBY ROBINSON, M.D., LL.D., Sc.D. New York: The Commonwealth Fund. 1939. Price, \$3.00.

**THE NEW-BORN INFANT.** A Manual of Obstetrical Pediatrics. By EMERSON L. STONE, M.D. 2nd Edition, Thoroughly Revised. Philadelphia: Lea & Febiger. 1938. Price, \$3.00.

**CLINICAL PATHOLOGICAL GYNECOLOGY.** By J. THORNWELL WITHERSPOON, B.S. (PRINCETON), B.A. and M.A. (OXON.), M.D. (JOHNS HOPKINS). Philadelphia: Lea & Febiger. 1939. Price, \$6.50.

**HYPERTENSION AND NEPHRITIS.** By ARTHUR M. FISHBERG, M.D. 4th Edition, Thoroughly Revised. Philadelphia: Lea & Febiger. 1939. Price, \$7.50.



# —Medical News—



## Passing of Dr. Schmitz

ON APRIL 17, 1939, Medicine lost one of its best known and pioneering radiologists, an eminent gynecologist and authority on cancer, and CLINICAL MEDICINE AND SURGERY, one of its distinguished associate editors, with the passing of Henry Schmitz, M.D., A.M., LL.D., F.A.C.S., F.A.C.R., professor of obstetrics and gynecology at Loyola University School of Medicine; a diplomate of the American Boards of Obstetrics and Gynecology, and also of Radiology; attending gynecologist and radiologist at several hospitals in Chicago; and a member of many professional and scientific societies, both in this country and in Europe.

When the *Department of Physical Therapy and Radiology* was inaugurated in this Journal in September, 1930, Dr. Schmitz became associate editor for the latter specialty (see that issue for a brief biographic sketch of him), and since then has contributed many thoughtful editorials and helpful articles to these pages. He will be sorely missed in his classroom, his consulting room, his hospital wards, and by our readers. Those of us who knew him personally are bereaved of a wise, helpful, and loyal friend.

## Passing of Dr. Stengel

DR. ALFRED STENGEL, well known pathologist, teacher, and medical writer, of Philadelphia, passed to his rest April 10, 1939, at the age of 70 years.

Soon after his graduation from the University of Pennsylvania, in 1889, Dr. Stengel joined the faculty of that Institution as instructor in clinical medicine. In 1896 he became clinical professor of medicine at the Woman's Medical College of Pennsylvania, and two years later assumed the professorship in medicine at his *alma mater*, and his teaching career filled the rest of his life (46 years).

He received the honorary degree of LL.D. from the University of Pennsylvania, and Lafayette College, and that of D.Sc. from the University of Pittsburgh. His "Textbook of Pathology" went to eight editions. For a time he was editor of the *American Journal of the Medical Sciences*; he also edited the American edition of Nothnagel's *Cyclopedia of Medicine*, and was on the editorial board of the *Archives of Pathology*. For two terms he was president of the American College of Physicians, and was a member of many professional societies and of the staffs of many hospitals. Medicine has lost, with his passing, a great physician, scientist, and teacher.

## "Slow Epinephrine"

EPINEPHRINE needs no introduction to the profession, and the only complaint about it, in the treatment of bronchial asthma and other symptoms of allergy, is that its effects are so brief. That trouble is overcome by "slow epinephrine" (which is merely a solution of the pure drug in peanut oil, 2 mg. to 1 cc.), recently introduced by Squibb. Given intramuscularly (subcutaneously if necessary; *never* intravenously), one dose controls bronchial asthma for from 8 to 16 hours.

## Vitamin B<sub>6</sub>

ANNOUNCEMENT was recently made that the complete synthesis of vitamin B<sub>6</sub> has been accomplished by Doctors S. A. Harris and K. Folkers, of the Merck Research Laboratories. This vitamin is known to prevent or cure an acrodynia-like dermatitis on the extremities of young rats, as well as a form of severe microcytic hypochromic anemia in puppies. With the limited amounts of the substance hitherto available, no adequate clinical work has been done on human beings, but now such research should be possible.

## Dr. Cullen Retires

DR. THOMAS S. CULLEN, professor of gynecology at Johns Hopkins Medical School, who has taught every student who ever graduated from that famous institution, retired recently, after 45 years of continuous teaching, at the age of 70 years. He will be sorely missed, not only for his ability as an instructor, but also for his skill and versatility at practical joking, for which he was almost equally famous. At the dinner celebrating his retirement, his students turned the tables on him by presenting him with a huge cake, made to look like an abdominal tumor. Wholly undismayed, Dr. Cullen dissected the "tumor" with a scalpel and gave every student a slice.

